Harding University
Scholar Works at Harding

Dissertations

12-2022

Factors Affecting Teacher Satisfaction and Retention in Small Rural School Districts in Arkansas

Toni Hopkins

Follow this and additional works at: https://scholarworks.harding.edu/hu-etd

Part of the Educational Leadership Commons, Elementary and Middle and Secondary Education Administration Commons, and the Other Education Commons

Recommended Citation

Hopkins, Toni, "Factors Affecting Teacher Satisfaction and Retention in Small Rural School Districts in Arkansas" (2022). *Dissertations*. 69.
https://scholarworks.harding.edu/hu-etd/69

This Dissertation is brought to you for free and open access by Scholar Works at Harding. It has been accepted for inclusion in Dissertations by an authorized administrator of Scholar Works at Harding. For more information, please contact scholarworks@harding.edu.

FACTORS AFFECTING TEACHER SATISFACTION AND RETENTION IN SMALL RURAL SCHOOL DISTRICTS IN ARKANSAS

by

Toni Hopkins

Dissertation

Submitted to the Faculty of

Harding University

Cannon-Clary College of Education

in Partial Fulfillment of the Requirements for

the Degree of

Doctor of Education

in

Educational Leadership

December 2022

FACTORS AFFECTING TEACHER SATISFACTION AND RETENTION

IN SMALL RURAL SCHOOL DISTRICTS IN ARKANSAS

by

Toni Hopkins

Dissertation

Kimberly Flowers Dissertation Advisor	09.12.22 Date
Lynette Breseme Dissertation Reader	09/12/22 Date
Michael Brooks Dissertation Reader	09.12.22 Date
Dean of the Cannon-Clary College of Education	9-12-22 Date
Provost	9/16/22 Date

©2022

Toni Hopkins

All Rights Reserved

ACKNOWLEDGEMENTS

Completing this dissertation was possible by the many levels of support in my life and most importantly, God, who makes all things possible. The hard work and perseverance needed to achieve my goals were instilled by my parents, Glenn and Jeroma Willhite. Their unconditional love and support are unmatched. My husband, Dwayne, supported me through this process by often and unselfishly using his time to take our camper to the local campground so I could have quiet time to write. My three sons, their wives, and my grandchildren may not have always understood the drive to complete this dissertation, but they were always supportive. My greatest hope is that I will be a role model to them as they work to achieve their goals in life.

A special thank you to my advisor, Dr. Flowers, who provided guidance, encouragement, and kept me on track. Dr. Busceme and Dr. Brooks served as readers on my committee, and their insights enriched my work. Thank you to all members of the Harding Educational Leadership Department. I am proud to be a part of Harding University. Thank you to Dr. Myers, who is not only an adjunct for Harding University but also my boss, for the encouragement and the model of Christian leadership you exhibit.

A special thank you to the educators in the five small rural districts in West-Central Arkansas that participated in this study. I see the challenges you face, the sacrifices you make each day, and the joy of serving in rural school districts.

ABSTRACT

by
Toni Hopkins
Harding University

Title: Factors Affecting Teacher Satisfaction and Retention in Small Rural School Districts in Arkansas (Under the direction Dr. Kimberly Flowers)

The purpose of this dissertation was to determine by teacher certification level the effects of 0-9 years of experience versus 10 years or more of experience on the perceptions of pay, supervision, colleagues, and working conditions as measured by the Lester Teacher Job Satisfaction Questionnaire. Understanding teachers' perceptions of job satisfaction may increase teacher retention. The theoretical framework was Maslow's theory of motivation and the hierarchy of needs. A stratified random sample of 144 teachers from five small rural school districts in West-Central Arkansas was used for the study. Data analysis involved the use of 2 x 2 factorial ANOVAs. The study found no significant difference between PK-6 and 7-12 or 0-9 years versus 10 years or more of experience on perceptions of pay or working conditions existed. However, a significant difference did exist in certification level and years of experience on teacher perception of supervision and colleagues. The mean score for perception of supervision for PK-6 was higher than 7-12. Regarding the perception of colleagues, the mean score of teachers with 10 or more years of experience was higher than for teachers with 0-9 years of experience. These findings indicate that school leaders should examine factors within their school that lead to positive job satisfaction.

TABLE OF CONTENTS

LIST OF TABLES viii

LIST OF FIGURES x

CHAPTER I—INTRODUCTION 1

Statement of the Problem 3

Background 3

Hypotheses 11

Description of Terms 12

Significance 13

Process to Accomplish 15

Summary 17

CHAPTER II—REVIEW OF THE RELATED LITERATURE 18

Theoretical Framework: Maslow's Hierarchy of Needs 19

Teacher Retention 27

Job Satisfaction 31

Pay 37

Supervision 39

Colleagues 41

Summary 50

CHAPTER 3—METHODOLOGY 52

Research Design 53
Sample 54
Instrumentation 54
Data Collection Procedures 57
Analytical Methods 57
Limitations 58
Summary 60
CHAPTER IV—RESULTS 61
Analytical Methods 62
Hypothesis 1 62
Hypothesis 2 66
Hypothesis 3 70
Hypothesis 4 74
Summary 77
CHAPTER V—DISCUSSION 79
Findings and Implications 79
Recommendations 87
Conclusion 91
REFERENCES 93

LIST OF TABLES

1. Means, Standard Deviations, and Number for Perceived Pay on Lester TJSQ by Certification Levels and Years of Experience 63
2. Factorial Analysis of Variance Results for Lester TJSQ Perceived Pay Scores as a Function of Certification Levels and Years of Experience 64
3. Means, Standard Deviations, and Number for Perceived Supervision on Lester TJSQ by Certification Levels and Years of Experience 67
4. Factorial Analysis of Variance Results for Lester TJSQ Perceived Supervision Scores as a Function of Certification Levels and Years of Experience 68
5. Means, Standard Deviations, and Number for Perceived Colleagues on Lester TJSQ by Certification Levels and Years of Experience 70
6. Factorial Analysis of Variance Results for Lester TJSQ Perceived Colleagues Scores as a Function of Certification Levels and Years of Experience 72
7. Means, Standard Deviations, and Number for Perceived Working Conditions on Lester TJSQ by Certification Levels and Years of Experience 74
8. Factorial Analysis of Variance Results for Lester TJSQ Perceived Working Condition Scores as a Function of Certification Levels and Years of Experience 75

9. Summary of Statistical Significance of Certification Levels and Years of Experience on Perception of Pay, Supervision, Colleagues, and Working Conditions by Hypothesis..... 78

LIST OF FIGURES

1. Maslow's Hierarchy of Needs 21
2. Comparison of Maslow's Original Hierarchy to Fisher and Royster's Hierarchy for Teachers 24
3. Means for Lester TJSQ Perceived Pay by Certification Levels and Years of Experience 65
4. Means for Lester TJSQ Perceived Supervision by Certification Levels and Years of Experience 69
5. Means for Lester TJSQ Perceived Colleagues by Certification Levels and Years of Experience 73
6. Means for Lester TJSQ Perceived Working Conditions by Certification Levels and Years of Experience 76

CHAPTER I

INTRODUCTION

Teacher retention can have multiple effects on education, including an overall decrease in the quality of teachers, which may cause decreased student achievement, and repeated budgeting for teacher recruitment, hiring, and training. When teacher retention is low, Garcia and Weiss (2019b) indicated that frequent turnover of the teaching staff might harm a student's learning ability, and the hiring process takes economic resources from the schools that could be used in other more beneficial areas. To cut turnover costs, administrators may look to retention factors to promote a stable education program for students taught by experienced, effective teachers allowing money to be put into resources other than recruiting and hiring. High teacher retention can positively affect students, teachers, and the school district.

Rural school districts can be found throughout the United States. The Rural School and Community Trust (2017) reported that rural school districts comprise 53% of the school districts in the United States. Showalter et al. (2019) added that 7 million or 14.2% of the United States public school students were enrolled in rural school districts. In Arkansas, the percentage of rural students was even higher. Derlikowski and Williams (2018) reported that 49% of the school districts in Arkansas were rural and enrolled 35.1% of the public school students in the state. These statistics indicate that rural school districts comprise more than half of the districts in the United States and educate 20% of

the country's students. Though the percentage of rural school districts in Arkansas is similar to that of the country, Arkansas students attending rural districts were more than double the national percentage.

One of the challenges of Arkansas rural schools is teacher retention. In the State of Arkansas Bureau of Legislative Research (2020a), 23.9% of the teachers surveyed indicated that they considered transferring schools or districts. Teachers gave three main reasons for this consideration: stress and workload (47.4%), higher pay (43.8%), and better leadership (31.7%). Examining these factors may benefit local and state leaders in Arkansas as they develop initiatives to increase teacher retention. Of the teachers responding to the State of Arkansas Bureau of Legislative Research, 6.8% indicated they were not very likely to spend their entire career as a teacher, and 2.7% indicated they were not very likely to spend their entire career as a teacher. Additionally, 30.7% were considering leaving the education field at the time of the study. These statistics represent almost one-third of teachers in Arkansas who are not satisfied in the teaching profession. Teachers are looking to transfer to other positions within their districts or other districts, and they are also considering leaving the teaching profession.

When teachers decide to remain in or leave their current positions, job satisfaction is critical to that decision. Flowers (2019) surmised that job satisfaction is key to improving teacher retention. Lester (1987) created the Teacher Job Satisfaction Questionnaire (TJSQ) and listed nine essential factors for teachers when measuring job satisfaction. These factors are pay, supervision, colleagues, working conditions, advancement, work itself, responsibility, recognition, and security. Each of these factors can be perceived as positive or negative in effect on teacher job satisfaction and,

ultimately, affect the decision to remain in or leave a teaching position. School leaders wanting to increase retention may look at these nine factors and other teacher-identified factors within their districts that affect teacher job satisfaction.

Statement of the Problem

This study had four purposes. First, the purpose was to determine the effects by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of pay measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas. Second, the purpose was to determine by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of supervision measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas. Third, the purpose was to determine by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of colleagues measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas. Fourth, the purpose was to determine by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of working conditions measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas. Teacher certification levels were defined as PK through 6th grades versus 7th through 12th grades.

Background

Education in Arkansas has progressed since the early 20th century; however, issues that were present during that time are still present today. In the late 1800s, people who wanted a local school marked off a land area and set up their district (Dougan,

2018). Dougan (2018) explained that one Arkansas county was reported to have 77 school districts due to people marking districts and establishing one as they wanted. Since then, Arkansas has consolidated school districts numerous times and has 261 districts (Arkansas Division of Elementary and Secondary Education Association, 2021b). Teacher retention in the late 1800s was low, and Dougan (2018) further explained that teacher training in the state was lacking, which resulted in teachers not being adequately trained. In 1907, two schools were established and provided teacher training programs in Arkansas. Arkansas teacher salary in 1903 was $34.46 a month; however, teachers could go to other states and make more money, as teachers in the western states made almost $60 a month. Teacher pay is still problematic in Arkansas and other states. Teachers in rural Oklahoma schools indicated that salary was a retention factor and could cross state lines and make more money (Lazarev et al., 2017). Arkansas teacher salary has increased over time, and according to the Arkansas Division of Elementary and Secondary Education Association (2021a), the minimum teacher salary in Arkansas was $34,900 and increased to $36,000 in the fiscal year 2023. Teachers' pay in Arkansas has been an issue for many years; however, recent efforts have been made to make salaries more competitive. Policy changes have affected district zoning and teacher pay throughout the years.

Early in the 20th century, little funding was available to school districts. Debt was not allowed for schools, and state support was $4.33 per student, leaving little money to maintain a school building after paying teachers (Dougan, 2018). Working conditions were not always good because little money was available to maintain school buildings. One alternative was that learning took place in churches, limiting maintenance costs.

Dougan (2018) added that, generally, high schools were only found in larger towns, so if parents wanted their children to receive a higher education than elementary, they had to move to towns where the school was located or have their child live with someone else in the town, allowing their child to attend high school. Overall, rural education was not considered as good as education in town schools. This movement had the effect of decreased enrollment in rural schools, which may have equated to lower teacher salaries and less funding for building maintenance. Arkansas still provides state funding based on student enrollment, which can be used for teacher salaries or building maintenance, indirectly affecting job satisfaction and retention.

Theoretical Framework: Maslow's Hierarchy of Needs

Maslow's hierarchy of needs is a motivational theory based on human needs and behaviors. Maslow (1943) explained that the goal of behavior is to satisfy needs. He proposed that human behavior is almost always motivated and driven by cultural, biological, and situational factors. The theory explains five basic needs for every person: physiological, safety, love, esteem, and self-actualization (Maslow, 1943). All human needs can be placed in Maslow's hierarchy. Fisher and Royster (2016) translated Maslow's hierarchy into a modified hierarchy of teacher needs. If a teacher's needs can be understood based on Maslow's hierarchy, this understanding may explain why a teacher would desire to leave a small rural district to teach in another district. Maslow's (1943) theory helps understand what motivates teachers to remain in place or move to meet needs. The circumstances in an individual's life determine needs that may be unique for each person. Meeting that need may mean teachers remain in their current district or leave small rural districts to teach in another district. Teachers' needs are intrinsic to the

individual, and the desire to meet the needs varies by person and motivates choices and behaviors.

Teacher Retention

School leaders may need to evaluate factors within the school if low teacher retention rates are an issue. Teacher retention levels are different at every school, and each district should devise a plan to overcome the retention issue (Holmes et al., 2019). To overcome negative retention rates, leaders in districts should understand their schools' strengths, weaknesses, challenges, and opportunities that affect their teachers (Holmes et al., 2019). Prowell (2019) suggested that administrators who market the highlights and challenges of teaching in a rural district may increase retention rates as teachers know what to expect before accepting a position in a rural school. A school's strong points and challenges can be understood through surveys and needs assessments that identify these areas. In complete transparency, a school can highlight both areas to potential hires, and school leaders open to improving factors can become reformers for improving teacher retention.

Job Satisfaction

Job satisfaction is a leading factor in retention. Ali (2016) defined job satisfaction as describing how individuals are pleased, comfortable, or satisfied with their job. He further described job satisfaction as a positive emotional feeling of a job well done. Job satisfaction occurs when a person's needs are met, but job dissatisfaction can occur, and retention may become an issue when needs are unmet. Flowers and Hughes (1973) contended that not all employees who remain in their positions are satisfied. An understanding of why employees remain is essential. For teachers, job satisfaction

leading to retention could be the district's location or friends who work in the district when they may be dissatisfied with other factors such as pay, supervision, or working conditions. A supervisor's understanding of Maslow's hierarchy of needs may help satisfy and retain employees. Pay, an extrinsic factor of job satisfaction, provides for the basic needs of an individual (Maslow, 1943) and provides security (Fisher & Royster, 2016). Respect, an intrinsic factor, meets the fourth level of need for esteem in Maslow's hierarchy and respect in Fisher and Royster's hierarchy of needs for teachers. Extrinsic and intrinsic factors affect a teacher's job satisfaction. The level of job satisfaction and the extent to which extrinsic and intrinsic factors contribute to job satisfaction differ for individual teachers based on their needs.

Job satisfaction factors may be intrinsic to the teacher or extrinsic to the school. Pay, supervision, colleagues, working conditions, advancement, the work itself, responsibility, recognition, and security have a bearing on job satisfaction (Lester, 1987). Building relationships is how administrators learn what factors are essential to teachers and staff. Administrators may not know the importance of these factors on job satisfaction in their buildings if they are unwilling to develop relationships with their staff, complete needs assessments, and work on identified issues.

Pay

A leading factor in teacher satisfaction and retention is pay. Decades ago, Lester (1987) noted that pay is an essential aspect of job satisfaction for employees in all fields and described teacher pay or yearly salary as the economic aspect of teaching. The United States Government Accountability Office (2020) defined pay as salary, extra pay, benefits, and pension. Gunther (2019) wrote that salary is one of the essential factors of

compensation that teachers consider when looking for job opportunities. Arkansas superintendents in the State of Arkansas Bureau of Legislative Research (2020a) indicated that difficulty in offering competitive pay was one of the highest barriers to teacher retention. Higher pay may incentivize more teachers to work in rural schools. The State of Arkansas Bureau of Legislative Research (2020b) reported that the 2020 average minimum salary for rural teachers was $34,120. The nonrural average minimum teacher salary for the same year ranged from $35,648 to $40,592. A disparity of $1,528 to $6,472 existed between rural and nonrural school teachers. Pay assists in meeting the basic needs of life, which according to Maslow's (1943) hierarchy, are food, water, shelter, and safety. Long-term teachers of 10 years or more reported pay as an essential factor in providing a reasonable standard of living and supporting their families (Chiong et al., 2017). Teachers desiring a higher standard of living than teaching in a rural school or teaching, in general, may be motivated to move to a higher-paying district or leave the profession. Pay provides security to teachers and enables them to provide basic needs for themselves and their families.

On the other hand, not all teachers are motivated by pay when examining satisfaction and retention. Oke et al. (2016) found that teachers did not enter the profession expecting to make much money. This finding implies that nonmonetary factors can be motivators for teaching. In Arkansas, teachers indicated that salary was a challenge, and higher pay would make staying in their current district easier (Gotte, 2019). Teachers in Gotte's study listed the nonmonetary factors of small class sizes, small systems, and small communities as benefits of working in a small school. Nonmonetary factors can be essential in job satisfaction and influence teachers' decisions to remain in

their current teaching position. School leaders may consider surveying their teachers to learn the nonmonetary factors that most influence their staff when pay is not competitive.

Supervision

Building and district supervision influences satisfaction and teacher retention rates. Boyd et al. (2011) determined that 40% of the teachers who left after their first year of teaching and those who had considered leaving in the first year indicated that leadership satisfaction was the main reason for leaving or considering leaving their current position. Lester (1987) defined supervision as the immediate supervisor and divided supervision into supervisory behavior and interpersonal relationships. Supervisory behavior describes the working environment, and interpersonal relationships describe a supervisor's characteristics while supervising employees. In a school setting, the school principal is generally the immediate supervisor. Positive interpersonal relationships between supervisors and teachers result in respect. Respect for oneself and others falls into the esteem level of need in Maslow's (1943) hierarchy of needs. According to Player et al. (2017), principal leadership does not affect a teacher's decision to remain in the teaching profession; however, principal leadership may affect a teacher's decision to remain in the school, regardless of the school's location. If teacher retention is low in a rural school district, Tran and Dou (2019) suggested that rural administrators develop their strengths in supporting rural teachers. Tran and Dou pointed out that leadership development programs could be provided to administrators focusing on rural-specific support that may promote commitment to the rural district. Great teachers will not be as great as they can be without strong leadership. If supervision is why teachers give for changing positions, district leadership may provide growth opportunities for increasing principal effectiveness through professional development.

Colleagues

Teacher colleagues and the relationships formed with colleagues can lead to job satisfaction and retention. The relationships formed provide an individual a sense of belonging to a group (McLeod, 2018). Bonds form when relationships are built, and thus the sense of belonging to a group develops. Maslow (1943) explained that relationships are an essential need for individuals and called this level of need *love* or *belongingness*. Fisher and Royster (2016) termed this level *association*. Nonrural teachers teaching in a rural school in South Carolina described a family-like feeling within their district (Prowell, 2019). Special education teachers in a rural school in Arkansas said that the smaller schools allowed a closer connection and more personal involvement with students and staff (Gotte, 2019). One early education and care services administrator suggested team and relationship building with peers as strategies that staff may use to increase retention (Hylton & Vu, 2021). This colleague bond may increase teacher retention as teachers will not want to consider losing these relationships. Administrators may purposely encourage the formation of relationships to increase job satisfaction.

Working Conditions

Working conditions, including a school's physical and working environment, may affect teacher job satisfaction and retention. Oke et al. (2016) contended that working conditions influence teachers' decisions to remain in or leave their current positions. Forty-four percent of Indianapolis teachers who volunteered to be transferred to a new position did so because of working conditions in their schools (Teach Plus, 2013). The United States Government Accountability Office (2020) noted that 54% of K-12 schools in the United States needed updates or replacements. The updates included heating,

ventilation, air conditioning systems, lighting, roofing, safety and security, structural integrity, and environmental conditions. In a survey by the State of Arkansas Bureau of Legislative Research (2017), 23% of Arkansas principals rated the overall condition of their school buildings, including electrical, plumbing, and heating and air systems, as fair or poor. Good working conditions meet the safety needs identified by Maslow. Maslow (1943) contended that people must live without danger and want good health to be satisfied. If teachers perceive poor working conditions, they may feel their health is threatened and desire to teach elsewhere. Administrators wanting to increase teacher job satisfaction will want to provide and lead a safe and orderly school environment for staff and students.

Hypotheses

The following hypotheses were formulated.

1. No significant difference will exist by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of pay measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas.
2. No significant difference will exist by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of supervision measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas.
3. No significant difference will exist by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of colleagues

measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas.

4. No significant difference will exist by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of working conditions measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas.

Description of Terms

Colleagues. Colleagues are a group of teachers that work together (Lester, 1987). Lester (1987) also encompassed aspects of social interaction, including job performance, relationship formation, and increased self-esteem.

Job satisfaction. Job satisfaction is a pleasurable or positive emotional state that results when individuals are pleased, comfortable, or satisfied with their job (Ali, 2016).

Small rural schools. Rural areas are geographic areas with small populations, few houses, and far from urban centers with populations of 50,000 or more people (United States Census Bureau, 2017). For this study, small rural schools have total student populations of 750 or less, town populations of less than 1700, and more than 20 miles from an urban center.

Pay. Pay is the annual income of an individual (Lester, 1987). Teacher compensation includes salary, extra pay, benefits, and pension (United States Department of Education, 2013). The term *pay* is used in the TJSQ and will represent teacher compensation.

Teacher retention. Teacher retention refers to teachers returning to the same school year after year. (Lochmiller et al., 2016).

Security. Security is the school's policies regarding tenure, seniority, layoffs, pension, retirement, and dismissal that affect teachers and can determine the school's stability or instability (Lester, 1987). Fisher and Royster (2016) listed security factors of taking care of oneself first, higher salary, more time for grading, health benefits, and retirement. Maslow's (1943) corresponding level of safety needs include comfort, salary, cleanliness, order, and feelings of safety.

Supervision. Supervision is the set of behaviors of the immediate supervisor that are task-oriented and person-oriented in focus (Lester, 1987). Supervision in schools will be synonymous with administration and leadership.

Working conditions. Working conditions refer to the environmental characteristics of the teaching situation, the physical condition of the facilities, and the overall aspects of the organization of the school defined and communicated by the school (Lester, 1987).

Significance

Research Gaps

Teacher satisfaction and retention and the positive and negative effects on education have been researched for years. However, little current research exists regarding teacher satisfaction and retention in Arkansas. Huysman (2008) suggested that instead of focusing on the factors that promote positive job satisfaction, research should focus on the factors that cause negative job satisfaction. When administrators acknowledge factors causing teacher job dissatisfaction, they may improve those factors and improve retention. Further, Chiong et al. (2017) indicated that little research had been done on why new or experienced teachers choose to remain in their current positions or

teaching as a career. Focusing research on why new teachers choose not to remain in their current rural teaching position may benefit school leaders in developing teacher retention programs specific to rural districts. This study's data was collected, interpreted, and attempted to provide insight to administrators in small rural schools in West-Central Arkansas on job satisfaction's negative and positive effects. Research on teacher job satisfaction may provide insight to administrators as they look to increase teacher retention in rural schools in Arkansas.

Possible Implications for Practice

Students and the school district may benefit from teacher retention. Retention can affect student academic success (Ingersoll, 2001) and a school district's fiscal functioning. Students benefit from retained teachers familiar with the school's procedures and culture. Retained teachers have experience teaching, which may increase student academic success, especially in hard-to-fill subject areas. School districts benefit financially, saving on the cost of mentoring new teachers. Administrators save time spent on recruiting and hiring processes. When teacher retention rates are low, districts are negatively affected in multiple ways.

Examining factors influencing job satisfaction and teacher retention will allow Arkansas school administrators to develop programs and procedures to increase teacher retention rates in small rural schools. Legislators should consider rules and regulations that focus on retention factors when possible. Teacher job satisfaction could be a topic in foundational education courses at colleges and universities as an additional method of informing students about the positives and negatives of teaching in rural areas. Additionally, universities could include training on factors affecting teacher job

satisfaction and exposure to teaching in rural schools through the administrator programs of study. Professional development and support to rural school administrators in understanding job satisfaction's role in teacher retention may be provided at the district level. Knowledge of job satisfaction and teacher retention factors can influence education-based and teacher and administrator preparation programs.

Process to Accomplish

Design

A quantitative, causal-comparative strategy was used in this study. For Hypotheses 1-4, four 2 x 2 factorial between-groups designs were used. The independent variables were teacher certification levels (elementary, PK through 6th grades versus secondary, 7th through 12th grades) and years of experience (0 to 9 years versus 10 years or more). The dependent variables for Hypotheses 1-4 included perceptions of pay, supervision, colleagues, and working conditions.

Sample

The sample included teacher survey responses in five small, rural schools in West-Central Arkansas. The schools were chosen because each was rural: schools had less than 750 students, and communities had populations of 1700 or less and were 20 or more miles from an urban center. The sample included 144 teacher responses: 31 PK through 6th teachers and 0 – 9 years experience; 33 teachers 7th through 12th grades and 10 or more years experience; 39 teachers PK through 6th grades and 10 or more years experience; and 41 teachers 7th through 12th grade and 10 or more years experience.

Instrumentation

In the spring of 2022, teachers in five small, rural schools were administered the Lester TJSQ. This questionnaire is composed of nine organizational factors that affect teacher job satisfaction. The 66 statements in the TJSQ are as follows: 13 items on supervision, 10 items on colleagues, 7 items on working conditions, 7 items on pay, 8 items on responsibility, 9 items on work itself, 5 items on advancement, 3 items on security, and 3 items on recognitions. Each question is scored using a Likert Scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Only the 38 statements referring to pay, supervision, colleagues, and working conditions were used. The TJSQ contains 29 reversed items; however, only 16 were used related to pay, supervision, colleagues, and working conditions. A composite score was tabulated for each of the four subsections. A tabulation provides an overall satisfaction score for pay, supervision, colleagues, and working conditions—the lower the tabulated score, the lower the participant satisfaction with that organizational factor. The statistical software program *IBM SPSS Statistics 27* (IBM Corporation, 2021) was used to perform the factor analysis and score the results of the TJSQ for this study. Lester (1987) noted from her analysis that the internal consistency of the TJSQ through computation of the Cronbach's alpha coefficient was .93 and that the Cronbach's alpha coefficient for the subtests of pay, supervision, colleagues, and working conditions were .80, .91, .82, and .83.

Data Analysis

A 2 x 2 factorial analysis of variance (ANOVA) was conducted using teacher certification levels (elementary, PK through 6th grades versus secondary, 7th through 12th grades) and years of experience (0 to 9 years versus 10 or more years) as the independent variables to address the four hypotheses. The four dependent variables were

perceptions of pay, supervision, colleagues, and working conditions. As is common in educational studies, an alpha level of .05 was set for the two-tailed test of each null hypothesis.

Summary

Rural school districts compose half the districts in Arkansas and the United States. Providing a quality and appropriate education to these students is the responsibility of rural schools (Huysman, 2008). Huysman (2008) cited that teachers are the most valuable resource of a rural school district and described them as vehicles that deliver the curriculum so that students can successfully meet the state and federal educational requirements. Job satisfaction is key to teacher retention, and efforts to improve job satisfaction may prove beneficial as leaders in school districts strive to provide quality education to students and reduce the financial burden resulting from low teacher retention.

The following chapter contains a literature review of teacher retention, job satisfaction, and four factors that affect teacher job satisfaction: pay, supervision, colleagues, and working conditions. Theories of motivation based on human needs and behaviors form why these factors are essential to teachers and how they affect decisions to remain or leave their current teaching position. Chapter II presents a literature review with Maslow's hierarchy of needs as the theoretical framework.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

Job satisfaction may influence teacher retention in rural school districts. Toropova et al. (2021) wrote that in addition to influencing retention, job satisfaction brings cohesion to schools, affects the well-being of teachers and students, and enhances the status of teaching as a profession. Job satisfaction can affect the educational setting for schools, teachers, and students. Frahm and Cianca (2021) asserted that rural schools have specific constraints that challenge teacher retention. These constraints include geographic location, lower salaries, and limited resources. These constraints sometimes develop a negative context for teacher job satisfaction. Subsequently, Frahm and Cianca surmised that rural schools need not be passive but active in overcoming teacher retention challenges. Rural school leaders familiar with job satisfaction factors and challenges to teacher retention in their schools may use that knowledge to diminish the effects on teacher retention.

Job satisfaction is different for each teacher and may result from internal and external factors. Lester (1987) listed nine factors of job satisfaction: pay, supervision, colleagues, working conditions, work itself, responsibility, security, recognition, and advancement. These nine job satisfaction factors may represent teachers' needs identified in the five levels of Maslow's (1943) hierarchy of needs. All nine factors affect teachers as they progress through their careers. Additionally, Fisher and Royster (2016) created a

hierarchy of needs for teachers that correlates with Maslow's hierarchy. Administrators who understand Maslow's hierarchy of needs and Fisher and Royster's hierarchy of needs for teachers may better understand a teacher's decision to remain in or leave a rural school district. Understanding the hierarchies may also lead to proactive strategies within a rural school to retain teachers.

This chapter reviews the literature on Maslow's hierarchy, teacher retention in general and Arkansas (a rural state), and factors affecting teacher job satisfaction that link to teacher retention. This chapter provides a brief historical review of teaching in Arkansas with an in-depth review of the literature on job satisfaction and recent influences on teacher retention. The chapter also includes a review of the literature about the nine factors of teacher job satisfaction, focusing on pay, supervision, colleagues, working conditions, and the effects on teacher retention.

Theoretical Framework: Maslow's Hierarchy of Needs

Maslow presents a hierarchy of needs relevant when considering a teacher's decision to remain in or leave the district where they currently teach. Maslow's (1943) hierarchy of needs is based on human needs, which are drivers or motivators of behaviors to meet the needs. Human behavior is the act of satisfying needs. Individuals' personal and professional needs correspond to one or more of Maslow's hierarchy's five levels of needs. Those professional needs motivate decisions. The needs of teachers may be viewed based on the hierarchy of needs and may be used to develop strategies to increase teacher retention.

The hierarchy contains five levels of needs that are often portrayed in a pyramid. The levels of Malow's hierarchy are physiological, safety, love, esteem, and self-

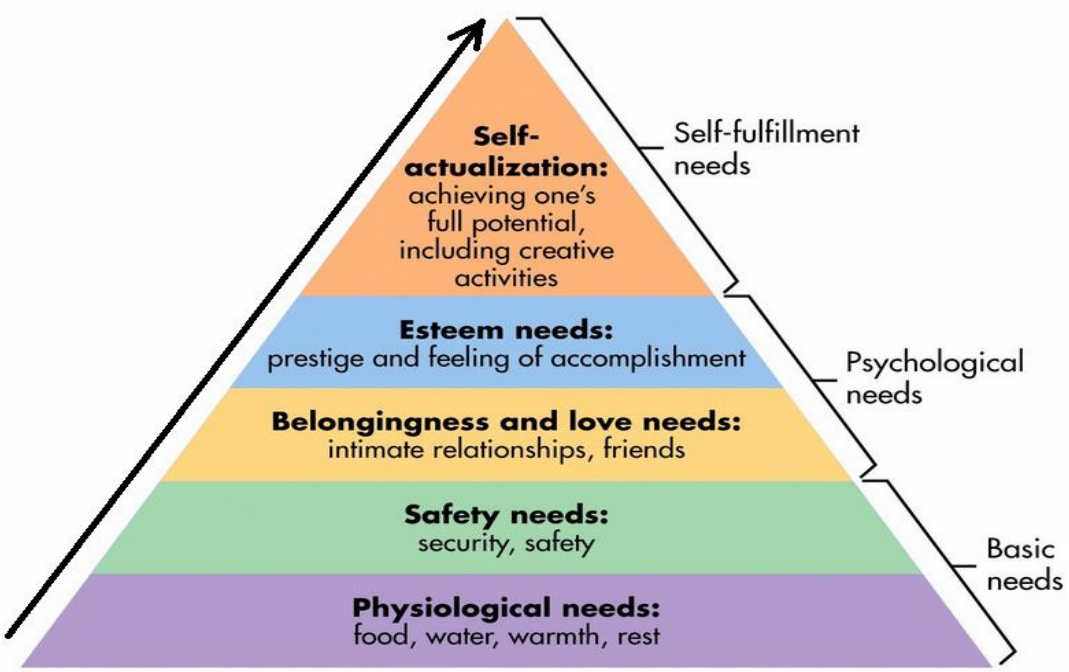
actualization (Maslow, 1943). Basic human needs form the bottom or base level of the pyramid and are called physiological needs. The other levels of need move up to create a pyramid. The second level is safety, the third is love, the fourth is esteem, and the fifth level is self-actualization. All human needs can be classified within the hierarchy of needs pyramid. According to Maslow (1943), before an individual can meet the needs of the next level, the needs of the lower levels must first be met. Once a need is fulfilled, the need will become less demanding and allow other needs to become more demanding. Maslow stated that the explanation of meeting the needs in the hierarchy implies that the lower needs have to be fulfilled before higher needs emerge but not always. Needs depend on internal and external factors, and particular needs may be more crucial to one individual than another. To a person seeking self-esteem, the need for love may not be as critical (Maslow, 1943). In this instance, a fourth-level need presents more strongly than a third-level need. Human needs move up and down the hierarchy and may fall into more than one level. Goals to meet these needs are the motivators that drive behaviors and are arranged in a five-level pyramid.

The physiological and safety level of needs combine and represent the basic needs of individuals. As shown in Figure 1, physiological needs are biological requirements for survival and include food, water, clothing, warmth, and air (Maslow, 1943; McLeod, 2018). The safety needs include protection from the elements, law, order, security, and freedom from fear (Maslow, 1943; McLeod, 2018). For a teacher, pay provides for physiological and safety needs. If pay in a rural school district is not enough to provide these basic needs, the teacher may decide to move to a different school district with higher salaries. Teachers may also view working conditions as a need if they feel unsafe

or necessary resources are not provided. Without the basic needs being met, an individual may be unable to meet other needs because the survival needs are most important (Maslow, 1943). Once the basic needs are met, they become less of a motivator, and the upper levels of needs may become more prominent motivators. The present needs will depend on the individual and factors of importance to them. All individuals have basic needs and are motivated to obtain these.

Figure 1

Maslow's Hierarchy of Needs.


Self-actualization: achieving one's full potential, including creative activities
Esteem needs: prestige and feeling of accomplishment
Belongingness and love needs: intimate relationships, friends
Safety needs: security, safety
Physiological needs: food, water, warmth, rest
Self-fulfillment needs
Psychological needs
Basic needs

Note. From "Maslow's hierarchy of needs," by S. McLeod, 2018, *Simply Psychology*, (https://www.simplypsychology.org/simplypsychology.org-Maslows-Hierarchy-of-Needs.pdf). Reprinted with permission.

The third and fourth levels of the pyramid combine to form psychological needs. Maslow (1943) identified love as the third level of need, including belongingness and affection. Maslow said that an individual would desire and work to achieve affectionate relationships. These relationships can involve a friendship, a spouse, or a child. McLeod (2018) described this need as a sense of belonging from affiliation with a group such as a church group, family, colleagues, or friends. For a teacher, colleagues may bring a sense of belonging. McLeod further included intimacy, trust, and acceptance as part of the love and belongingness need. The fourth level in the hierarchy is esteem, which individuals want and need, according to Maslow (1943). He separated esteem into two categories. The first category is esteem that an individual has for himself, such as self-respect. Maslow described self-esteem as a desire for achievement, adequacy, confidence, and independence. The second category relates to esteem from others, such as prestige and respect. Respect from supervisors and colleagues may meet the esteem need of a teacher. Love and esteem combine psychological needs, though not everyone will have these needs met. However, people with lower-level needs met are more likely to be presented with and strive to fulfill the needs higher in the hierarchy.

The fifth and top level of the pyramid is self-actualization which all individuals do not achieve. Maslow (1943) described this level as a person becoming more of what he already is "to become everything that one is capable of becoming" (p. 382). McLeod (2018) described self-actualization as when an individual pursues personal growth, has peak self-fulfillment and reaches full potential. The pursual of self-fulfillment may be encouraged by colleagues and supervisors. Fisher and Royster (2016) explained that teachers who feel they have something important to share in the teaching profession

beyond one-to-one sharing have reached self-actualization. Maslow (1943) explained that self-actualization is expressed differently for every individual and may be seen in the arts, athletics, or parenthood. Maslow contended that self-actualization might occur once the four lower levels of needs have been met. However, since these levels are not rigid, all four levels may not always require fulfillment, depending on the circumstances. Maslow described people who have all lower levels of needs fulfilled as satisfied, allowing full self-actualization (Maslow, 1943). The ability to meet the lower needs will enable individuals to focus on the highest need of self-actualization. People excelling in their professions may have reached the self-actualization level.

Maslow's hierarchy of needs may help explain why a teacher would want to leave or stay in a small rural district. According to Maslow (1943), behaviors are driven by needs and are motivated by a desire to fulfill needs. Understanding the needs that motivate teachers to remain in place or move to a different district may benefit leadership in a school district. Life circumstances determine individual needs, and for teachers, these circumstances may motivate them to leave small rural districts to teach in larger districts or remain in their current districts to meet their needs. A teacher's needs are intrinsic to the individual, and the desire to meet the needs motivates the choices and behaviors.

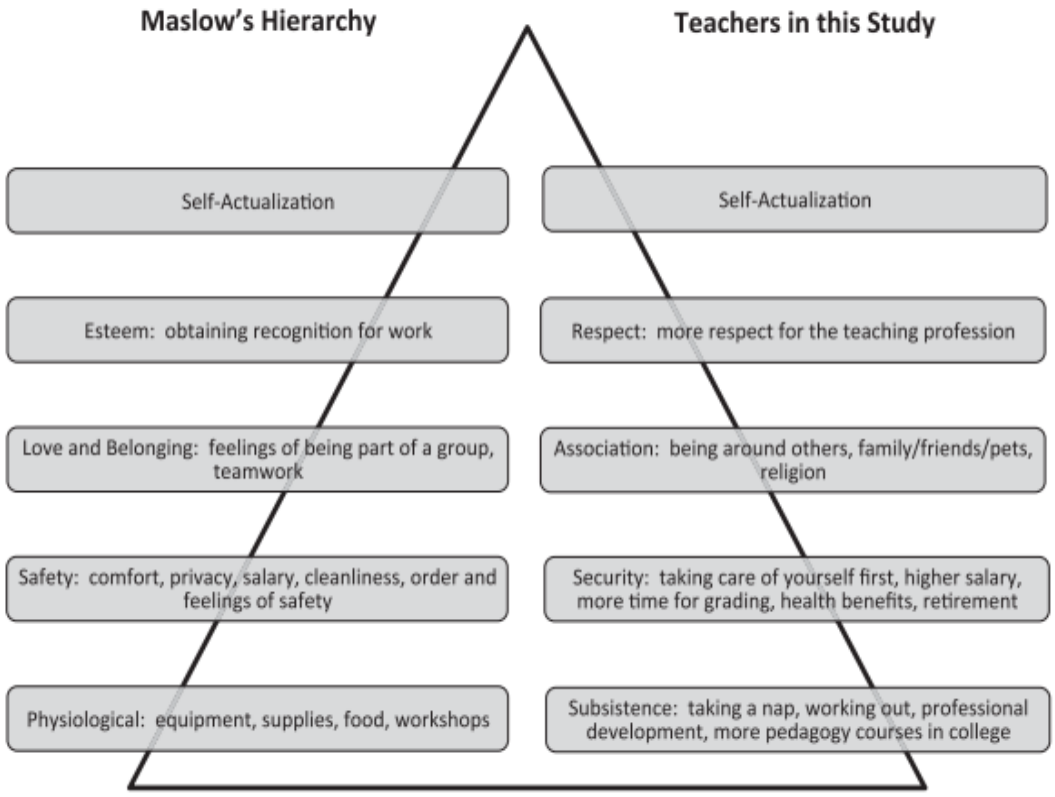
Variations of Maslow's Hierarchy of Needs

Variations of Maslow's theory exist. One variation has been applied to the teaching profession. Fisher and Royster (2016) used teacher responses to interview questions and a literature review to develop a hierarchy of needs for teachers that correlates with Maslow's hierarchy. The five levels of this teacher's hierarchy of needs are subsistence, security, association, respect, and self-actualization. A comparison of

Maslow's original hierarchy of needs and Maslow's hierarchy for teachers (Fisher & Royster, 2016) is shown in Figure 2. The needs of teachers closely resemble Maslow's hierarchy. Needs included in Maslow's hierarchy are generic for all individuals; the comparison by Fisher and Royster is specific to teachers.

Figure 2

Comparison of Maslow's Original Hierarchy to Fisher and Royster's Hierarchy for Teachers


Maslow's Hierarchy
Teachers in this Study
Self-Actualization
Self-Actualization
Esteem: obtaining recognition for work
Respect: more respect for the teaching profession
Love and Belonging: feelings of being part of a group, teamwork
Association: being around others, family/friends/pets, religion
Safety: comfort, privacy, salary, cleanliness, order and feelings of safety
Security: taking care of yourself first, higher salary, more time for grading, health benefits, retirement
Physiological: equipment, supplies, food, workshops
Subsistence: taking a nap, working out, professional development, more pedagogy courses in college

Note. From "Mathematics teachers support and retention: Using Maslow's hierarchy to understand teacher's needs," by M. H. Fisher and D. Royster, 2016*, International Journal of Mathematics Education in Science and Technology, 47*(7), 993-1008 (https://meteoreducation.com/wp-content/uploads/Mathematics-Teachers-Support-and-Retention.pdf). Reprinted with permission.

A school administrator's understanding of the hierarchy of needs for teachers may lead to change within a rural school and increase teacher satisfaction leading to teacher retention. Fisher and Royster (2016) compared teachers' subsistence needs to Maslow's physiological needs, and their model included equipment, professional development, and supplies at the lowest level. Teachers in Fisher and Royster's study indicated that these needs represent the basic needs of teachers. The bottom level of needs is present for anyone beginning something new, including new teachers (Fisher & Royster, 2016). Fisher and Royster (2016) added that subsistence needs include sleep, working out to reduce stress, and professional development. The second level of the teacher hierarchy is security, comparable to the safety level in Maslow's original hierarchy. Maslow (1943) identified comfort, order, and cleanliness as needs at the safety level. Teachers listed taking care of themselves, salary, and more time for grading papers as priorities. This links with the job satisfaction factor of pay presented by Lester (1987), as pay represents a teacher's salary. Subsistence and security needs are the basic needs of teachers. Administrators willing to prioritize these needs in the school system may increase job satisfaction and decrease teachers' motivations to leave the district.

The third level of the teacher hierarchy is association, comparable to Maslow's third level of need: love or belonging. Fisher and Royster (2016) described association as teachers associated with or belonging to a group, such as a grade-level team. Collegial relationships and a sense of belonging may form due to working with a group of teachers. The fourth level in the Fisher and Royster teacher hierarchy is recognition for work, which Maslow classified as esteem in his original hierarchy. Recognition from one's supervisor may indicate respect for the teacher and the teacher's work and reinforce

relationships. The highest level of need in both hierarchies is self-actualization. Maslow's theory (1943) and Fisher and Royster's (2016) model described self-actualization as when individuals perceive they have reached the pinnacle of whatever they are pursuing. For teachers, reaching professional goals may be self-actualization. Fisher and Royster suggested that understanding the teachers' hierarchy may help those involved in supervision better understand the needs of teachers at pivotal points in their careers. The teacher hierarchy represents educators new to education who have grown and reached the profession's pinnacle. A leader's knowledge of these levels of needs could lead to changes in the schools' support to teachers, resulting in increased job satisfaction and a higher retention rate.

Maslow's hierarchy of needs has been used to promote schoolwide transformation. In one low-performing, low-socioeconomic school, deliberate attention to Maslow's hierarchy of needs moved the school from a state of crisis to a school of distinction (Fisher & Crawford, 2020). The school principal evaluated the needs of students and staff based on Maslow's theory. The principal began to meet each need at the lowest hierarchical level. As needs were met, movement up the hierarchy began, and the school began to move out of crisis mode. Once the lowest levels of needs were met, the school and staff became more stable. Teachers became less competitive with each other and more competitive with personal growth, which caused teachers to move up the hierarchy of needs toward self-actualization (Fisher & Crawford, 2020). As a result of the principal's actions and knowledge of the hierarchy of needs, a change resulted for the school, students, and staff. Implementing Maslow's hierarchy of needs at any school could promote change, improve satisfaction, and increase teacher retention. School

leaders wanting to promote change within their schools and staff might consider Maslow's hierarchy of needs by first identifying and meeting the basic needs.

Teacher Retention

Retention rates affect all professions, not just education. Shakeel and But (2015) defined employee retention as keeping the same employees. Shakeel and But suggested that efforts that motivate and incentivize employees to remain should be developed and implemented to retain employees in an organization. Retention rates may increase if a retention plan keeps employees in their current employment. Low retention rates are often considered harmful to an organization. However, Shakeel and But pointed out low retention may not always harm an organization. Shakeel and But believed that not having a balanced level of turnover could result in a monotonous system without new ideas, changes, dynamism, and creativity that new employees may bring to an organization. Turnover may not always be considered harmful. Turnover may sometimes be necessary to innovate within the organization. In a conceptual model of retention factors created by Shakeel and But, when monetary and nonmonetary factors were examined, nonmonetary factors were more significant than monetary factors when employees were considering a job change. They found compensation to be fifth overall in retention factors. Career development was the top nonmonetary retention factor, along with adequate training and working conditions. Nonmonetary factors may be the primary decision-makers when employees consider moving to another organization. While high retention rates are generally desirable, employers who want fresh ideas and change within their organizations may benefit from turnover.

Teacher retention is an issue throughout the United States and can affect school achievement. High teacher turnover can affect the quality of the teaching staff (Sorenson & Ladd, 2020). Gunther (2019) agreed that low retention rates negatively affect the quality of instructional staff and student achievement. Sorenson and Ladd (2020) determined that significant drops in student mathematics and reading scores were linked to high teacher turnover rates. New and inexperienced teachers can disrupt the development of the educational program. If the replacement teacher is less qualified than the teacher leaving the position, the quality of education could decrease, especially if the turnover is high for that position (Sorenson & Ladd, 2020). Low retention rates can affect the quality of education a school offers and diminish student achievement. When teachers in a secondary school in Utah ranked retention factors, school achievement ranked third in importance (Gunther, 2019). School achievement is essential to teachers and can affect their decisions to remain in or leave a school. A correlation could exist with student achievement if a school has high teacher turnover.

Teacher Retention in Rural Schools

Challenges that are unique to rural schools can affect teacher satisfaction and retention. Blair (2017) cited that these challenges include exclusion, isolation, and a lack of resources for the school and the communities they serve. He argued that a difference exists in rural and urban schools, and teacher training and distribution of resources should reflect the differences. Training or professional development is at the subsistence level of the hierarchy of needs (Fisher & Royster, 2016). These subsistence needs are basic needs for survival and teacher success. One way to make a difference is for teacher leaders in rural schools to lead efforts to challenge the factors that threaten the viability and

integrity of rural schools (Blair, 2017). Teachers working in rural schools will face challenges different than those in nonrural schools. Despite the challenges of a rural school environment, teachers indicate that rewards can be found. Blair (2017) noted that challenges associated with rural schools included exclusion and isolation, lack of resources in the school and community, teacher recruitment and retention, teacher licensure in STEM subjects, lack of access to technology, and harmful stereotypes linked to the language and culture (Blair, 2017). The rewards of working in rural schools were being a role model, a mentor, and a teacher to the students and the rural community. Despite the challenges of teaching in rural schools, teachers also found teaching in rural schools rewarding. Knowing teachers' challenges and rewards while teaching in a small rural school may benefit administrators. That knowledge may be used to develop a plan to minimize the challenges and maximize the rewards of rural teaching.

Teacher retention may not have a positive effect on all schools. Grisson and Bartanen (2019) proposed that retention efforts should not equally target all teachers. Grisson and Bartanen suggested that the overall quality of the teaching staff in a school can be improved by retaining high-performing teachers and not retaining low-performing teachers. However, Grisson and Bartanen noted that hiring candidates might be limited in rural areas. Rural schools may face the decision to retain a low-performing teacher or have an open teaching position if they choose not to retain the low-performing teacher. A teacher evaluation system to measure teacher performance when retaining low-performing teachers may be beneficial. Adnot et al. (2017) used *selective retention*, which describes what occurs when low-performing teachers are not retained and are replaced with higher-performing teachers. Adnot et al. suggested that student

achievement and teaching quality will improve when higher-performing teachers replace low-performing teachers. However, when rural districts have a position to fill, the number of applicants may be limited. If acceptable applicants are available, a district wanting to improve the quality of the teaching staff may choose this strategy of replacing poor-performing teachers with higher-performing teachers. However, if the higher-performing teachers are unavailable, the school may need to decide what to do regarding retaining the poor-performing teacher.

Often rural schools and communities face declining enrollment, decreased funding, and loss of community business. Monk's (2007) characteristics of rural communities included small size, few homes, dependency on agriculture, and a distance from higher population communities. Concerns related to the loss of business and youth migration to urban areas were addressed in the *Rural Profile of Arkansas* (University of Arkansas Division of Agriculture Research and Extension, 2021). As families and businesses move out of rural areas, enrollment in rural schools declined. This movement out of rural communities contributed to enrollment in rural schools in Arkansas, dropping by 7% in the past 10 years (University of Arkansas Division of Agriculture Research and Extension, 2021). Gotte (2019) further explained that rural communities offer fewer jobs for young people and fewer opportunities for funding and resources. When communities do not have jobs, families may have to move to more populated areas where work is available to meet what Maslow called the basic needs of survival: food, shelter, or warmth (Maslow, 1943). Businesses moving out of rural areas may also lead to families moving, thus taking students from rural schools. School funding that is based on enrollment numbers also decreases. However, school fixed costs, such as teacher salaries,

may not change. Funding issues tied to enrollment can strain the district budget, affecting retention.

Job Satisfaction

Job satisfaction may lead to an increase in teacher retention rates. O'Reilly (2014) found a significant correlation between job satisfaction and retention. He also found that job satisfaction decreased as the school grade level increased, though teachers at all levels had the most satisfaction when they were intrinsically motivated. Teachers in O'Reilly's study indicated that as feelings about school climate, support, and professional development grew positive, so did job satisfaction. Perrachione et al. (2008) noted that teachers who had worked at their current positions for more than five years listed personal teaching efficacy, working with students, and job satisfaction as reasons for staying in their current position. According to a National Center for Education Statistics (2019) survey, 90% of lower secondary teachers in the United States agreed or strongly agreed that they were satisfied with their jobs. However, 49% of the teachers indicated dissatisfaction with their jobs when surveyed about working in challenging work environments. These statistics may indicate that the school and teaching position characteristics may affect job satisfaction. These factors are monetary and nonmonetary considerations, and each factor affects teacher job satisfaction. Lester (1987) listed nine factors of job satisfaction. The factors can have intrinsic and extrinsic effects on job satisfaction. In a job satisfaction questionnaire by Huysman (2008), teachers in a rural school in Florida indicated that the top 11 out of 20 factors for their job satisfaction were intrinsic. The top five intrinsic factors were security, activity, social service, variety, and use of abilities. In this survey, 85% of rural teachers indicated they were satisfied and intended to remain in their positions. Most of these teachers who ranked the 11 intrinsic factors high were teachers who had grown up in rural areas. Teachers

who did not grow up in a rural area ranked the intrinsic factors low. Knowledge and a focus on these intrinsic job satisfaction factors may benefit rural administrators wanting to increase teacher satisfaction and retention.

Work Itself

The work of teaching leads to job satisfaction for teachers. Lester (1987) referred to this factor of job satisfaction as the task, creativity, and autonomy that teachers encounter daily in their positions. She further explained that job satisfaction through work itself came from teachers having the opportunity to select materials and choose procedures to use in their classrooms. Teachers can be innovative and utilize their skills and abilities to create lessons (Lester, 1987). Maslow (1943) said that self-esteem might result from feelings of accomplishment. Teachers want to control their classrooms, student learning, and teaching methods. Controlling these aspects of teaching may cause feelings of accomplishment and increased self-esteem in a teacher. Administrators who provide teacher autonomy and the freedom to choose much of what happens in their classrooms may increase job satisfaction and retention in their schools.

A stimulating work environment can affect job satisfaction through the work itself. Secondary teachers in an international study reported that they gained pleasure from their work (Yavuzkurt & Kiral, 2020). Additionally, Canadian teachers commented that teaching is the difference between a job and a vocation and brings fulfillment, lifelong learning, and a dynamic work environment (Taylor et al., 2014). Taylor et al. (2014) revealed that when teachers are provided a dynamic work environment, they feel they can be creative and are often provided unique and challenging situations daily by the students, parents, and colleagues, which leads to overall satisfaction with teaching. A

dynamic work environment is valued and leads to teacher retention (Taylor et al., 2014). Teachers are often presented with challenges in the classroom that may affect job satisfaction. Teachers who enjoy this type of work environment may find the work rewarding and wish to remain in their current position or move to one where a more dynamic work environment exists.

Responsibility

Working in a rural school where staff is limited may lead to many responsibilities for a teacher. The Texas Rural School Task Force (2017) listed teachers having many responsibilities as a factor influencing teachers' decisions to remain in their current positions or leave the teaching field. Not all research about the effects of responsibilities on teacher retention is negative. Lazarev et al. (2017) ascertained that increased responsibilities positively influenced retention for some teachers. In this case, the positive influence of responsibility supports that retention of teachers in rural schools is related more to teacher characteristics than to characteristics of the school or district (Lazarev et al., 2017). Huysman's (2008) study revealed that rural teachers listed the responsibilities of the everyday work of teaching as one of the top factors that brought enjoyment to their jobs. When these responsibilities are accomplished, feelings of esteem may result in the teacher's third level of need, according to Maslow (1943). However, in an interview with Fisher and Royster (2016), teachers reported being expected to care for many problems. Rural schools may need to be mindful of the distribution of teaching responsibilities so that balance is provided that supports teacher esteem.

Along with those problems are new daily issues and new curricula to learn. Teachers felt these factors were too much when compounded one upon the other and felt

that new duties were added each year while none were taken away (Fisher & Royster, 2016). New teachers in Virginia reported that they did not realize all the expectations involved in education (Certo & Fox, 2002). The amount of responsibilities a teacher can effectively handle is individual to the teacher and may negatively or positively affect job satisfaction and retention. An awareness that responsibility can positively or negatively affect a teacher's job satisfaction may be critical as administrators look to hire teachers that are a good fit for rural districts and long-term retention.

Security

Feelings of security may contribute to teacher retention. Tenure, retirement, dismissal, layoffs, and pensions were determined to be elements of security by Lester (1987). Fisher and Royster (2016) identified security as the second level of needs in their teachers' hierarchy of needs model. In Fisher and Royster's model, security includes taking care of self-first, having a higher salary, having more time for grading, and accessing health benefits and retirement. Security is an essential consideration for teachers. Davis (2002) identified four main factors that attract and retain elementary teachers in small rural schools in Montana. These factors affect a teacher's decision to remain in their current positions and include a safe environment, relationships with parents, enjoyment of the rural lifestyle, and support from parents and communities. Security can be monetary or nonmonetary and is considered a basic need in the hierarchy of needs. Administrators may not have control of all security factors, but focusing on the factors within their control may increase teacher satisfaction and retention.

Recognition

Recognition is another factor of job satisfaction that may lead to teacher retention. According to Lester (1987), recognition is described as some act of notice, blame, praise, or criticism. She said recognition relates to attention, appreciation, prestige, and esteem from students, parents, colleagues, and supervisors. Recognition can be positive or negative, depending on the circumstances. Maslow (1943) said that people want reputation or prestige, which he defines as respect or esteem, and comes through recognition from others. Maslow stated that all people want some level of esteem from others and self-esteem. Teachers desire esteem and recognition just as individuals in other professions. Recognition correlates with Fisher and Royster's (2016) fourth level of respect. The teachers in Fisher and Royster's study agreed with previous researchers that teachers wanted more respect in society. They suggested that the first step for teachers to be shown more respect is increased salaries, which is a part of the security need in the hierarchy. In 2018, 36% of lower secondary teachers in the United States agreed that society values the teaching profession (National Center for Education Statistics, 2019). At 36%, only about one-third of teachers feel they have respect outside of the education field. Suggestions from teachers about increasing respect for the teaching profession and putting the suggestions into practice may increase teacher job satisfaction and retention.

Positive recognition from supervisors can be robust in increasing teacher job satisfaction. Player et al. (2017) identified that administrators who recognize exemplary teacher performance might indirectly affect retention. Player et al. considered this strategy to be fundamental in retaining highly-qualified teachers. Administrators who find positive ways to recognize teachers may retain more high-performing teachers than

negative recognition or no recognition. An administrator in an organization that offers traditional early education and extended pediatric care to children found that creating a work environment where teachers felt valued, respected, and appreciated increased retention rates (Hylton & Vu, 2021). Over the past 10 years, the administrator had an 80% success rate in staff retention and explained that verbal recognition at staff meetings and handwritten notes were strategies that made teachers feel appreciated. Administrators who develop strategies to recognize teachers may improve teacher job satisfaction. Teacher recognition may make a teacher feel valued and satisfied and want to remain in their current teaching position, thus improving retention rates in the school.

Advancement

Opportunities for advancement may be limited in a small rural school. Advancement refers to a change in position or status through opportunities for promotion (Lester, 1987). Advancement aligns with self-actualization, the highest level in Maslow's (1943) hierarchy and Fisher and Royster's (2016) teacher model. The first four levels of Maslow's hierarchy of needs are considered deficiency needs; however, the fifth level of self-actualization is considered a growth need (McLeod, 2018). McLeod (2018) suggested that administrators know which teachers desire self-actualization and support them in their growth. Individuals who feel the need for self-actualization may be motivated to meet this need by seeking professional growth opportunities or bettering themselves in status or financial considerations through advancement. Fisher and Royster (2016) described teachers who have reached the self-actualization level as having reached the respect level and feel they have something important to offer the profession. A teacher addressing the need for self-actualization may move from publishing an article in

a journal or presenting at a local conference to presenting nationally. At that point, a teacher may have reached the high point of their teaching career. Not all teachers will reach or desire self-actualization; however, teachers in a rural district seeking this level in their careers may need to leave the district to attain self-actualization.

Pay

Teachers who work in rural schools feel that providing more pay may help more teachers overcome the challenges of working in and remaining in rural schools. Almost 50% of the teachers in the State of Arkansas Bureau of Legislative Research (2020a) indicated they would relocate to a rural district if the pay were competitive. Teachers in some of the smallest rural schools in Illinois agreed that competitive salaries and insurance packages help teacher retention (Ulferts, 2016). When Lazarev et al. (2017) questioned teachers in rural school districts in Oklahoma, they found that an extra $1,080 annually would increase the chances of hiring a new teacher, and just $249 extra annually would increase the chances of retaining a teacher. As the amount increased, so did the chances of retaining teachers. Competitive pay may incentivize more teachers to accept a position or remain working in a rural environment. Teachers suggested retention stipends or adding days to contracts to increase teacher pay (Gotte, 2019). Pay provides what Maslow (1943) called basic or survival needs, such as food and shelter. Wanting higher pay is a security need in Fisher and Royster's (2016) hierarchy of needs for teachers. A teacher's behavior to meet this need may occur through advancement or moving to a different district. Pay affects a teacher's standard of living. When rural teachers desire a higher standard of living, pay that is not competitive may influence teachers' decisions to leave their current positions to work in a higher-paying district.

Pay is a crucial job satisfaction factor that can negatively affect a school when the pay is not comparable with surrounding locations, motivating teachers to move to higher-paying districts. In Virginia schools, urban, suburban, and rural, Certo and Fox (2002) found that one of the top reasons teachers left their positions was insufficient salaries. Monk (2007) indicated that teacher turnover in rural schools was high, hiring was often challenging, and low compensation for teachers existed. Furthermore, Showalter et al. (2019) contended that rural districts often serve the neediest student populations but cannot pay a salary competitive to larger districts to retain teachers. Through an analysis of data, Showalter et al. found that Arkansas ranked near the bottom of the states having the lowest adjusted average salary for rural educators when the location was taken into account. Teacher compensation affects a teacher's satisfaction and can sway the decision to remain or stay in a district, especially if a teacher can go to bordering districts, counties, or states with higher pay. School districts unable to pay a competitive salary may need to look to other factors to attract and retain teachers.

Nonmonetary

If pay is not a primary need for a teacher, the second level of need (security) may not present as strong and allow other needs to become dominant. In two secondary schools in Utah, teachers considering leaving their positions said that nonmonetary and monetary factors were considered (Gunther, 2019). Teachers in rural schools in Florida reported that 11 of the top 20 job satisfaction factors were intrinsic and not associated with salary (Huysman, 2008). The five top-ranked intrinsic factors of teachers included job security that provides for steady employment, social service, opportunities to use teaching abilities, activities of teaching, and the variety of work. Nonmonetary factors are

essential to teachers when remaining in their current positions. School administrators may affect retention rates by knowing the top nonmonetary factors teachers value, leading to teacher retention in their school districts.

Nonmonetary factors can make teaching rewarding and lead to retention. Long-term teachers of 10 years or more indicated that pay and holidays were less critical in retention and that mastery of teaching and altruistic factors were more critical (Chiong et al., 2017). Teachers in Canada said their top reason for teaching was making a difference in the lives of their students (Taylor et al., 2014). The teachers felt ownership in the growth and achievement of their students. Their second top reason was the relationships built with students, parents, colleagues, and the community. Extrinsic factors, such as pay, were less critical the more years the teacher was in education but significantly more important to new teachers. The longer teachers work in education, their reasons for remaining in the field may change. Administrators identifying intrinsic factors important to their teachers throughout their service may increase teacher satisfaction and retention.

Supervision

Supervision can have positive and negative effects on teacher job satisfaction and retention. Lester (1987) described supervision as the behaviors of task-oriented and person-oriented. Task-oriented behaviors include the activities of supervising, and person-oriented behaviors describe the behaviors of a supervisor as they relate to staff. Supervision in a school is generally under the school principal. Holmes et al. (2019) contended that solid leadership could promote transformation, influencing teacher retention. Forty-nine percent of teachers who voluntarily transferred to other schools within the Indianapolis Schools District gave school leadership the primary reason for wanting the change (Teach Plus, 2013). Barnes (2017)

suggested that schools invest more resources into their leaders and make improving principal leaders a part of the strategic planning process. Supervision can have a direct influence on teacher job satisfaction. Administrators aware of the effects of supervision on job satisfaction may promote job satisfaction in the school as they manage and interact with their staff. Principals affect teachers in various ways. Player et al. (2017) named leadership behaviors that indirectly affect teacher retention. The behaviors included communicating the vision and facilitating the mission, supporting teachers in instruction and other issues, and enforcing rules associated with student behavior and discipline (Player et al., 2017). In schools that struggled to retain teachers, principals who made teachers feel that they made a difference and principals who provided emotional support positively affected teachers' satisfaction and decisions to remain in their current positions (Hughes et al., 2015). Barnes (2017) described principals as cheerleaders for their schools. An awareness by principals of the emotional influence they have on teacher job satisfaction may retain teachers. Ansley et al. (2019) surmised that putting people first was one of the most important actions to increase job satisfaction. He suggested that since administrators cannot control state-mandated school policies or salaries, they should change what they can, such as the teacher's workload (Ansley et al., 2019). Huysman (2008) contended that a rural school's teaching staff is the most valuable and accessible resource. Administrators making positive changes where possible and making teachers feel they are an asset to the school can affect how teachers feel about teaching. Teachers who feel valued may have higher job satisfaction and feel encouraged to remain in their current positions.

The strength of leadership in the school may be a factor in the strength of the staff. Pechota and Scott (2020) reported that solid leadership improves school quality and the recruitment and retention of high-quality teachers. Principals tend to hire teachers

with similar characteristics and expectations. If a principal has high expectations, they tend to hire teachers with high expectations, which contributes to the quality of the school. Pechota and Scott reported that in 2019, 20 states, including Arkansas, enacted legislative policies to produce strong school leadership. The policies focused on teacher preparation, mentoring, professional development, evaluation, and compensation (Pechota & Scott, 2020). As a piece of this legislation, states could target high-performing teachers and provide them with leadership pathways to become administrators. This pathway to becoming a principal may meet the self-actualization need of a high-performing teacher who chooses to use leadership skills beyond the classroom. Alternative pathways would allow high-performing teachers to be selected by their current schools to pursue principal licensure. Strong leadership in school districts may influence the quality of the school and the teaching staff. Policies and programs aimed at leadership improvement may provide the skills to principals that promote job satisfaction, leading to the retention of high-quality teachers.

Colleagues

Relationships

Teachers' personal and professional relationships with colleagues may lead to teacher retention. Maslow (1943) and Fisher and Royster (2016) listed the feelings of belonging and association as a need. Belonging and association result from bonds formed through professional relationships of teachers working in the same school. Yavuzkert and Kiral (2020) said that job satisfaction comes from teachers' colleagues with whom they are happy to work. Often friendships develop because of the work environment, which for teachers includes long hours, intensive work programs, and a shared perception of

how vital collaborative work is for the school (Yavuzkert & Kiral, 2020). Yavuzket and Kiral (2020) showed a positive relationship between secondary teachers' perceptions of friendship opportunities and job satisfaction. This positive significance of teachers' perception of friendship opportunities predicted job satisfaction. Yavuzkert and Kiral surmised that the perception of friendship opportunities on job satisfaction indicated that the school administrators supported friendships and policies that allowed healthy collegial environments and opportunities to collaborate. Teacher relationships may form naturally in the school environment. However, administrators may purposely plan school functions and schedules to encourage the formation of teacher relationships.

When the teacher and school fit aligns, job satisfaction may increase. Miller et al. (2020) discussed the importance of teachers fitting in with their schools and the effects on retention. When Miller et al. asked teachers what kept them working in the same district, relationships with co-workers were revealed as one of the top reasons. If a teacher perceives that colleagues share the same values and professional goals, the chances of retention increase (Miller et al., 2020). Likewise, when the values of teachers and the school align, teacher retention increases (Barnes, 2019). In districts where teachers share the same values, relationships may build more quickly, and the district may be more vital because of teacher relationships. Administrators with an awareness of factors of relationship building may promote professional connections among the teachers. These connections may lead to teacher job satisfaction and increase teacher retention rates.

Mentoring may be a valuable strategy for building professional relationships among teachers new to rural teaching. Miller et al. (2020) found that promoting professional relationships with teachers new to teaching was vital for teacher retention.

Fisher and Royster (2016) noted that the professional relationship might help new teachers not feel so isolated as they begin their careers. Fry and Anderson (2011) discovered that when beginning teachers did not have a mentoring relationship, they experienced a more difficult first year. In rural districts, mentor teachers can explain the school's functioning and provide an overview of the students and the rural community, easing the transition. Fry and Anderson contended that this information could make the first year in a rural school smoother. Brenner et al. (2021) suggested a strategy for rural schools with limited opportunities to build relationships, such as a school with only one kindergarten teacher or mathematics teacher. Administrators may look for opportunities to help teachers build professional relationships with others outside the district, such as at neighboring districts or professional organizations, which may lead to support for the teachers (Brenner et al., 2021). To build professional relationships, teachers new to rural schools may need mentors who can guide them through their first years of teaching or in a rural school to whom they can go for advice and assistance. Mentoring relationships within or outside of the district may help ease the challenges experienced by teachers during their first year in a rural school.

Native to Rural Communities

Teachers have various reasons for accepting positions in rural schools. Rural Illinois teachers gave three reasons for accepting positions in the rural schools where they taught (Ulferts, 2016). The reasons included the position being the best or only job offer, their families or homes being close, and small class sizes. Ulfterts (2016) found that 82.3% of rural Illinois teachers were not native to their teaching area, and 83.19% did not live in the community. Additionally, 60% of the teachers said they would not choose to

live in the rural community where they taught. Administrators in rural districts may look for potential teachers within their schools and communities and encourage and support them as they work to become certified teachers (Davis, 2002). Davis (2002) suggested providing stipends to encourage certification acquisition for paraprofessionals already working in and familiar with the school. Administrators may have better retention results by hiring someone familiar with the rural culture, including those already a part of the school system. However, if no one with a rural background is available, teachers unfamiliar with rural settings may accept a position because no other positions are available. Miller (2020) surmised that rural living is not for everyone, so school leaders may find ways to help teachers new to a rural district adjust if the rural setting is unfamiliar. Therefore, understanding what motivates a teacher to accept a position and developing strategies based on motivations may make the position more appealing, and the teacher may not want to leave the rural position.

Districts may look to hire teachers in their communities to decrease turnover. The State of Arkansas Bureau of Legislative Research (2020a) found that one trend from the recommendation of school superintendents was to use the *Grow Your Own Teacher Program*. Arkansas schools might grow their own teachers through the Arkansas Teacher Cadets Program, allowing schools and districts to recruit students who show leadership skills within their schools to become teachers. The Educator's Rising Arkansas Program through the Arkansas Division of Elementary and Secondary Education (2022) provides pathways for districts similar to grow your own programs. This program works through the career and technical education (CTE) program. Recruitment and retention efforts of Educator's Rising Arkansas Program teach students about opportunities in teaching and

the skills needed, which helps students make informed decisions about the pathway to teacher licensure. The Texas Comprehensive Center (2018) reported that programs such as the Grow Your Own Teacher Program may benefit districts because the recruited high school students are familiar with the rural lifestyle and have community ties. This familiarity may lead to retention when recruiting and hiring teachers already familiar with the school and community. The report indicated that most teachers work in a school near their hometown, so a program such as a grow-your-own-teacher program may be successful. At the time of the report, little research or evidence on the program's success was available, and most evidence came from evaluations of or improvements to the program. However, the report included that studies have suggested that high school recruitment programs may be more effective than programs that target adults. Students recruited through the Grow Your Own Teacher Programs generally have connections and relationships within the school and community. These relationships meet the third level of need, belonging and association, in the hierarchy of needs (Fisher & Royster, 2016; Maslow, 1943). School administrators may look to students who wish to remain in their home communities as future teacher candidates. Grow Your Own Teacher programs may be a viable strategy for teacher retention.

Leaders in rural schools can increase retention rates by helping teachers unaccustomed to the rural lifestyle adjust. In a rural school in east Texas, teachers who were native to the rural community said that what kept them working in the same district was growing up in the rural community (Miller, 2020). Miller (2020) said that not growing up in a rural area presented challenges to new teachers unfamiliar with a rural lifestyle, such as the small community, few businesses, and the closeness of the

community's people. Teachers in urban areas may have many businesses close to where they live and reside in a community where few people know them. Administrators in rural schools can help teachers from nonrural backgrounds adjust to the rural culture by providing professional development, fostering relationships with parents, and encouraging staff to integrate with the community (Barton, 2012). Administrators may want to help teachers adjust when a teacher is not used to the rural lifestyle. Developing programs within a district that involve teachers familiar with the rural district and community can be a robust support system for teachers who are newly hired to a rural school.

Programs exist to help new teachers become accustomed to unfamiliar cultures. A Texas State University program requires preservice middle school teachers to collaborate with their professors and the classroom teacher for 2 semesters before beginning their student teaching (Van Overschelde et al., 2017). This program gives preservice teachers time to adjust to the reality of teaching in different school cultures, increasing retention rates. More knowledge and integration into a rural culture may be provided when colleges and districts partner for this extended time. This program can benefit teachers with no rural background knowledge who must take a position in a rural school, making the first year less stressful.

Working Conditions

The working conditions of a rural school district can positively or negatively affect teacher job satisfaction and retention. Lester (1987) described working conditions as the physical condition of the school, the formulation of policies, and aspects of the school organization defined and communicated by the policies. Schools where the

physical conditions are suitable may have high retention rates, but schools where the conditions are poor or deteriorating may experience difficulty retaining staff. Maslow (1943) said that people want a safe and orderly world. Teachers spend multiple hours working at school and may desire safe and orderly working conditions. Reaves and Cozzens (2018) agreed with Maslow's findings that teachers working in a safe and orderly school have increased intrinsic motivation. Teachers who feel the school is safe and orderly may be more inclined to remain in their current positions. Administrators may work to improve areas within their schools that are perceived as unsafe or disorderly to increase teacher satisfaction with the working conditions.

Factors other than the condition of the facilities affect working conditions. The Organization of Economic Co-operation and Development (2021) explained that teacher working conditions are also shaped by factors other than the physical condition of the facilities. These factors include compensation, working time, teacher-student ratios, facilities, and good school leadership, and each factor affects teacher job satisfaction. Schools where the environmental conditions are suitable may have high retention rates. Teachers' perceptions of working conditions may influence their decisions to remain in their current positions (Burkhauser, 2017). The poor physical conditions of school buildings may concern teachers' health and safety. Maslow (1943) identified safety as a need in the second level of the hierarchy of needs, including good health. If teachers perceive that the physical condition of the school facilities is a danger to their health, they may move to another district where the school conditions are perceived to be better. Facilities can influence teacher job satisfaction and retention. District administrators may

want to consider the effects of the school buildings' conditions on the health and safety of the teachers and how these conditions affect job satisfaction.

School climate may be considered a factor in the working environment of a school. Garcia and Weiss (2019a) implicated school climate as affecting job satisfaction, teachers' abilities to perform well, and the desire to remain in their current teaching positions. Burkhauser (2017) suggested that in schools where teacher turnover is high, district administrators should look at the school climate and support and advise principals on improving the climate. To understand how school climate may affect working conditions in their schools, principals could survey or interview teachers and develop a plan to make the school climate and working conditions more favorable. Bozeman et al. (2013) surveyed science teachers and found that most were satisfied with their career choices and colleagues. However, fewer teachers were satisfied with the school facilities, equipment, and support for informal science. When teachers do not have the resources they need, perceptions of the working conditions may decrease, and job satisfaction rates go down. The physical and working environment may influence the school climate and working environment.

Working in a rural school may not always be easy, especially when combined with high poverty. Showalter et al. (2019) reported that one in six rural students lives in poverty. Teachers in high-poverty and rural schools in the United States described the working environment as demanding (Garcia & Weiss, 2019a). Garcia and Weiss (2019a) noted that 27.3% of teachers observed that students came to school unprepared, and 21.5% of the parents struggled to be involved. These issues contributed to the difficulty of working in rural schools. Five percent of the teachers admitted they did not feel

teaching was worth the stress and disappointment. Additionally, a Public Schools First NC (2021) report regarding rural public schools said that 64% of rural counties in the United States have high poverty rates. In North Carolina, rural poverty rates were 62%, while urban poverty rates were 46%. The report stated that the North Carolina rural students who live in poverty do not have access to enrichment activities at home or resources for at-home learning and enter school with a learning gap that increases with age. Garcia and Weiss (2019a) formed a link between harsh school climates and teachers quitting. In North Carolina, 25 of 30 districts with the highest turnover rate were rural (Public Schools First NC, 2021). Rural schools with high poverty challenge teachers to remain in their current positions and remain in the teaching field. Principals of rural schools with high poverty rates may have teachers who find that environment challenging and benefit from extra support.

Principals can affect working conditions within schools. Podolsky et al. (2017) found that external factors such as parent involvement, age of facilities, or salary did not retain teachers but that the community, climate, and culture make a teacher feel valued and excited to go to work, making the idea of leaving the school something they would not consider. Podolsky et al. also noted that working conditions involved components previously discussed, such as leadership, collaboration with colleagues, class size, facilities, and resources. Burkhauser (2017) determined that teachers who associated a principal favorably with one area of the school environment tended to have a favorable view in other areas. Gunther (2019) surmised that improving working conditions helped offset the effects of lower salaries for teachers working in high-needs schools. Principals may find one area to promote a positive perception in the school working environment

and use that area to make teachers feel excited about coming to work. The principals' efforts to increase positive perceptions of the working environment may increase job satisfaction and affect teachers' decisions to remain in the district.

Summary

Teacher job satisfaction can positively or negatively influence teacher retention rates in rural school districts. The influence on teacher retention affects students, staff, and the district. When job satisfaction and teacher retention are low, teacher quality and student achievement may be diminished, and resources used for repeated hiring processes are taken from other resources in the district (Garcia & Weiss, 2019b). Efforts by the administration to diminish the influences of teacher retention can positively affect the district, which may be evident by having a high-quality staff, high student achievement, and money usually spent on hiring practices moved to other resources that directly benefit the students. Lester (1987) listed nine factors contributing to teacher job satisfaction: pay, supervision, colleagues, working conditions, work itself, responsibility, security, recognition, and advancement. A close look at four factors (pay, supervision, colleagues, and working conditions) indicated that these job satisfaction factors might directly affect teacher retention. Flowers (2019) stated that job satisfaction is the key to improving teacher retention. Knowing these factors may benefit administrators as they work to make changes within a district with low retention rates. Knowing these factors may also benefit administrators wanting to maintain a high retention rate in their districts.

The literature review acknowledged the importance of job satisfaction factors and their influences on teachers' decisions to remain in or leave their current teaching position in rural schools. A teacher's decision is motivated by individual needs.

Determining the effects of pay, supervision, colleagues, and working conditions on job satisfaction may lead to the development of retention plans by school leadership to increase or maintain high retention rates. Chapter III discusses the sample, the data collecting instrument and procedures, the research design, and an analysis of the significance of the job satisfaction factors by teacher certification level versus years of experience. The chapter concludes with the limitations of the study.

CHAPTER III

METHODOLOGY

Factors of teacher job satisfaction may affect teacher retention in small rural school districts. Administrators wishing to change teacher retention in their schools may benefit from understanding Maslow's (1943) hierarchy of needs. Additionally, Fisher and Royster (2016) adapted Maslow's hierarchy of needs into a hierarchy of needs for teachers, which may aid an administrator's understanding of whether teachers choose to stay in their current teaching position or remain in education. Lester (1987) listed nine factors of teacher job satisfaction: pay, supervision, colleagues, working conditions, advancement, work itself, responsibility, recognition, and security. These factors can positively or negatively affect teacher job satisfaction and, ultimately, the decision to remain in or leave a teaching position. The factors represent the needs of teachers and can be classified into one or more of the five levels of need in Maslow's hierarchy. This study focused on the factors of pay, supervision, colleagues, and working conditions and how much influence the factors have on a teacher's level of job satisfaction. Administrators who understand how these factors may influence teacher job satisfaction may use that information to improve or enhance the factors to promote a change in retention rates in the school.

The following null hypotheses were formulated to address the problem in this study:

1. No significant difference will exist by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of pay measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas.
2. No significant difference will exist by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of supervision measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas.
3. No significant difference will exist by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of colleagues measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas.
4. No significant difference will exist by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of working conditions measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas.

This chapter discussed the research design, the sample used in the study, the instrumentation, the data collection procedure, the analytical methods, and the study's limitations.

Research Design

A quantitative, causal-comparative design was used. The causal-comparative design was used because this design looks for relationships between independent and dependent variables, and the variables in the study cannot be manipulated (Maheshwari,

2018). The hypotheses were tested using four 2 x 2 factorial ANOVAs. The independent variables were teacher certification levels (elementary, PK through 6th grades versus secondary, 7th through 12th grades) and years of experience (0 to 9 years versus 10 years or more). The dependent variables for Hypotheses 1-4 included perceptions of pay, supervision, colleagues, and working conditions. Perceptions of teacher job satisfaction data were collected from PK through 12th-grade teachers in West-Central Arkansas.

Sample

The study sample included PK through 12th-grade teacher responses to the Lester TJSQ in five small rural school districts in West-Central Arkansas. The five rural schools in the study had student populations of less than 750 each in communities with populations of 1700 or less and were 20 or more miles from an urban center. For Institutional Review Board approval, the superintendent of each school district provided written permission to collect the data. The superintendent also electronically forwarded the Lester TJSQ survey to the certified teachers in their districts. Teachers submitted responses to 144 completed questionnaires. First, the responses were stratified by certification level. Then, the certification levels were stratified by years of experience. The scores were subdivided into four groups: 0-9 years and PK-6th (n = 31), 0-9 years and 7th-12th (n = 33), 10 or more and PK-6th (n = 39), and 10 or more and 7th-12th (n = 41).

Instrumentation

The Lester Teacher Job Satisfaction Questionnaire (TJSQ) was the instrument used for the study. The TJSQ was created by Lester (1987) at Long Island University. The questionnaire assesses teachers' job satisfaction perceptions based on nine factors:

pay, supervision, colleagues, working conditions, advancement, work itself, responsibility, recognition, and security. Before her study, Lester studied methodologies, concepts, and theories related to job satisfaction. Lester used Herzbergs' two-factor motivation theory (Nickerson, 2021) and Malow's hierarchy of needs (1943) to analyze educational job satisfaction factors. Herzberg's theory divides satisfaction factors into satisfiers and dissatisfiers. The satisfiers are considered the motivators. Improving these factors may increase job satisfaction and include factors such as recognition, advancement, and the work itself. The dissatisfiers, also called hygiene factors, may decrease job dissatisfaction and include salary, working conditions, colleague and supervisor relationships, and policies and rules. The classifications used in Herzberg's theory and Maslow's hierarchy provided the study's theoretical framework and supported the foundations used to create the TJSQ. For the study, Lester (1987) sampled eight school districts in New York City and surrounding counties, choosing an elementary, junior high, and senior high from each district. Initially, 120 job characteristics were identified when the questionnaire was being developed. These characteristics indicated job characteristics that became known as factors. The factors and the definitions of each were presented to a panel of judges for content validation. The questionnaire items were then written to focus on teachers in an educational setting. Lester presented the questionnaire to elementary, junior high, and senior teachers, focusing on teacher job satisfaction factors of teachers at all grade levels.

The nine factors of the TJSQ relate to teacher job satisfaction. Lester (1987) defined pay as the annual income of an individual. Teacher compensation includes salary, extra pay, benefits, and pension (United States Government Accountability Office, 2020).

Supervision is the immediate supervisor's task- and person-oriented behaviors as defined by Lester (1987). Colleagues are a group of teachers that work together. Working conditions refer to the teaching situation's environmental characteristics, the facilities' physical condition, and the overall aspects of the organization of the school defined and communicated by the school (Lester, 1987). Advancement refers to a change in position or status through opportunities for promotion. Lester described the work itself as the task, creativity, and autonomy teachers experience. Responsibility, another factor of job satisfaction, has three components: responsibility for one's work, participation in school policy, and student-teacher relations. Lester said the recognition was acts of notice, blame, criticism, or praise. Security is related to stability and considers tenure, retirement, and dismissal policies. The nine factors are found in educational environments and can affect a teacher's job satisfaction positively or negatively.

Each statement within the questionnaire relates to one of the nine factors. The questionnaire consists of 66 statements requiring teacher responses on a Likert scale. However, only the 37 statements relating to pay, supervision, colleagues, and working conditions were used in this study. Seven statements were related to pay, 13 statements were related to supervision, 7 statements were related to working conditions, and 10 statements were related to colleagues. Scores for the four factors were measured using a 5-point Likert-scale (1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Neutral*, 4 = *Agree*, 5 = *Strongly Agree*). Fourteen of the 37 statements used in this study were reverse-scored. For each questionnaire, the total score for each factor was computed. The higher the total score for a factor, the more significant the effect on a teacher's perception of job

satisfaction. When completing the questionnaire, teachers were also asked about their certification levels and years of experience.

Data Collection Procedures

An email was sent to five district superintendents, and a letter granting permission for the districts to participate in the study was obtained from the superintendents prior to the Institutional Review Board submission. The Institutional Review Board approved the study on March 16, 2022. The voluntary questionnaire was sent to the superintendents, who forwarded the electronic questionnaire to the certified teachers within their districts. The questionnaire was completed by the teachers and collected anonymously. The responses could not be matched to the teachers as responses were collected electronically, and no personally identifiable information, including email addresses, was collected. An informed consent paragraph was included at the beginning of the survey to inform teachers that the survey was anonymous and voluntary. The data were collected and downloaded as a spreadsheet. The data were stored in a secure location.

Analytical Methods

The data for this study were analyzed using *IBM Statistical Packages for Social Sciences* (SPSS) *Version 27* (IBM Corporation, 2021). The data for the hypotheses were coded according to certification levels and years of experience. The following codes were used: certification levels (1 = PK–6th grades, 2 = 7th–12th grades) and years of experience (1 = 0–9 years and 2 = 10 years or more). The four hypotheses were then analyzed using a 2 x 2 factorial between-groups ANOVA. The independent variable for each hypothesis was teacher certification levels (PK through 6th grades versus 7th through 12th grades) and years of experience (0–9 years versus 10 years or more). The

dependent variables for the four hypotheses were the perceived pay, supervision, colleagues, and working conditions measured by the Lester TJSQ for each factor. Scores for the factors were measured on a 5-point Likert scale. A total score for each factor was computed by adding all statements relating to job satisfaction. A two-tailed test with a .05 level of significance was used to test the four hypotheses.

Limitations

As with any research study, limitations should be considered in interpreting the study's findings. First, the sample size was limited due to the number of teachers working in small rural schools in West-Central Arkansas. Participation in the study was voluntary for the teachers, limiting the number of responses. A second limitation was that the independent variables could not be manipulated due to the causal-comparative design. The possibility of groups not being equivalent based on other demographic characteristics, such as gender and race, could threaten the study's internal validity (Maheshawri, 2018). In this study, all completed questionnaires were included, producing an unequal number of samples in the groups.

A third limitation was the effects of the COVID-19 pandemic on teacher job satisfaction. New challenges have been presented to teachers within the last 2 years that may have affected their job satisfaction. The Centers for Disease Control and Prevention (2022) has presented a COVID-19 timeline. In late 2019 and early 2020, COVID-19 began spreading in the United States. A Centers for Disease Control and Prevention spokesperson announced in February 2020 that COVID-19 might cause severe disruption to everyday life, and in March 2020, the World Health Organization declared COVID-19 a pandemic. According to the Centers for Disease Control and Prevention (2022),

President Donald Trump declared a nationwide emergency in March. Two days after President Trump's announcement, Arkansas and other states closed schools and businesses. In April 2020, the Centers for Disease Control and Prevention recommended that all people wear a mask when in public. Social distancing became a requirement as deaths due to COVID-19 were expected to reach high levels.

Arkansas schools did not return to school for the rest of the 2020 school year, forcing schools to provide instruction virtually. A commissioner's memo from the Arkansas Department of Education (2020) guidance for schools regarding COVID-19 was issued. When schools resumed in August, all students and staff required social distancing and mask-wearing. Virtual learning was provided for students who chose not to attend school in person. Also, virtual learning was made available so students could continue learning if they were quarantined due to COVID-19. Teachers unaccustomed to virtual instruction and lacking the technology skills to provide virtual learning were trained in those skills. The challenges presented to the teachers through the pandemic were the social distancing of themselves and their students, quarantines for the teachers and their families, and virtual teaching and learning. Diliberti et al. (2021) found that almost half of the teachers who quit teaching after March 2020 did so because of the pandemic. The teachers in the study reported a higher than usual stress level due to working more hours, learning the remote environment, and technology issues. However, Rosenberg and Anderson (2021) found that teacher turnover had declined from 17.3% to 12.6% in 2020, the first year the pandemic affected schools. In this case, the effects of the pandemic on teacher turnover were not seen as unfavorable. However, many teachers' decisions to quit teaching have changed due to COVID-19.

A fourth limitation was that one of the districts in the study had adopted a 4-day school week. The 4-day school week was not a consideration in this study. However, Turner et al. (2018) found strong teacher support for the 4-day week after the first year and that 89% of the staff said they were more productive during the shortened workweek. Teachers reported that morale had increased over the first year; however, studies beyond the first year of implementation may need to be conducted to determine the effects on teachers' perceptions of the 4-day school week. Despite these limitations, the results of this study may provide administrators with insight into factors of teacher job satisfaction. This insight may be used to make changes within schools to improve teacher retention.

Summary

Stratification by certification levels and years of experience on teachers' perceptions of job satisfaction based on pay, supervision, colleagues, and working conditions as measured by the Lester TJSQ was used in this study. Knowledge of teachers' perception of pay, supervision, colleagues, and working conditions is essential when school administrators desire to improve teacher retention rates. Teachers' needs affect their perceptions of job satisfaction, and an understanding of needs may be obtained through knowledge of Maslow's (1943) hierarchy of needs and Fisher and Royster's (2016) hierarchy of needs for teachers. Chapter III explained the methods for the research. A 2 x 2 between-groups design, factorial ANOVA, was used to analyze data for the four hypotheses. The results and a summary are discussed in Chapter IV.

CHAPTER IV

RESULTS

This study had four purposes. First, the purpose was to determine the effects by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of pay measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas. Second, the purpose was to determine by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of supervision measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas. Third, the purpose was to determine by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of colleagues measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas. Fourth, the purpose was to determine by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of working conditions measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas. Teacher certification levels were defined as PK-6th grades versus 7-12 grades. The independent variables for each hypothesis were certification levels (PK through 6th grade versus 7th grade through 12th grade) and years of experience (0–9 years versus 10 or more years). The dependent variables for the four

hypotheses were teachers' measured responses to the Lester TJSQ relative to perceptions of pay, supervision, colleagues, and working conditions.

Analytical Methods

The data were analyzed using the *IBM Statistical Packages for the Social Sciences (SPSS) Version 2* (IBM Corporation, 2021). The collected data for the four hypotheses were coded according to certification levels and years of experience. The following codes were used for the independent variables: certification levels (1 = PK-6, 2 = 7-12) and years of experience (1 = 0-9 years, 2 = 10 years or more). Each hypothesis was analyzed using a 2 x 2 factorial ANOVA using a between-groups design. Scores for the four groups were measured using a 5-point Likert-scale for agreement scale (1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Neutral*, 4 = *Agree*, 5 = *Strongly Agree*). The data were collected from 144 teachers in five small rural schools in West-Central Arkansas. The teacher responses were stratified by certification levels. Then the certification levels were stratified by years of experience. Four groups containing a total of 144 responses were used in the study. The assumptions of independent observation, homogeneity of variances, and normal distributions of the dependent variable for each group were checked. No teacher contributed scores in more than one group, meeting the assumption for independent observation. Levine's test of variance was used to check for homogeneity of variances, and the assumption of normality was checked using the Shapiro-Wilk test.

Hypothesis 1

Hypothesis 1 stated that no significant difference would exist by teacher certification levels between 0 to 9 years of experience versus 10 years or more experience on the perceptions of pay measured by the Lester TJSQ for PK through 12th-grade

teachers in five small rural schools in West-Central Arkansas. A 2 x 2 factorial ANOVA was conducted to test this hypothesis. Before conducting the statistical analysis for the factorial ANOVA, data were screened for entry errors and missing values, with none found. The data were also checked for outliers, assumptions of independence of observations, assumptions of normality, and homogeneity of variances. Descriptive statistics and inferential results were also reviewed. Table 1 illustrates group means, standard deviations, and *n* values of perceptions of pay as a function of certification levels and years of experience.

Table 1

Means, Standard Deviations, and Number for Perceived Pay on Lester TJSQ by Certification Levels and Years of Experience

	Years of Experience								
	0-9 Years			10 or more Years			Total		
Cert Level	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*
PK-6	14.77	4.44	31	15.90	4.78	39	15.40	4.63	70
7-12	15.79	4.13	33	17.10	5.55	41	16.51	4.98	74
Total	15.30	4.28	64	16.51	5.19	80			

Note. Cert Level = Certification Levels.

To test the assumptions of normality, outliers were checked, and no extreme outliers were detected. The Shapiro-Wilk statistics and histograms were examined for each group. The skewness and kurtosis values were outside the 1.0 and -1.0 range for one

of the four groups. The Shapiro-Wilks test was used to test for normality for the four groups: 0-9 years PK-6, $W(31) = 0.98$, $p = .691$; 0-9 years 7-12, $W(33) = 0.94$, $p = .065$; 10 or more years PK-6, $W(39) = 0.96$, $p = .214$; and 10 or more years 7-12, $W(41) = 0.95$, $p = .098$. All the groups had a positive skew, but no group violated normality. Levene's test of equality of variances was conducted within the ANOVA, and the test indicated that homogeneity of variances across the groups could be assumed, $F(3, 140) = 1.47$, $p = .225$; therefore, this assumption was not violated. A 2 x 2 factorial between-groups ANOVA was performed to test the interaction effect between certification levels and years of experience on the Lester TJSQ for perceptions of pay. The results of the ANOVA are displayed in Table 2.

Table 2

Factorial Analysis of Variance Results for Lester TJSQ Perceived Pay Scores as a Function of Certification Levels and Years of Experience

Source	*SS*	*df*	*MS*	*F*	*p*	*ES*
Yrs of Exp	52.57	1	52.57	2.27	.134	0.016
Cert Level	43.53	1	43.53	1.88	.172	0.013
Exp*Cert Level	0.31	1	0.31	0.01	.908	0.000
Error	3236.13	140	23.12			

R Squared = .029 (Adjusted *R Squared* = .009).

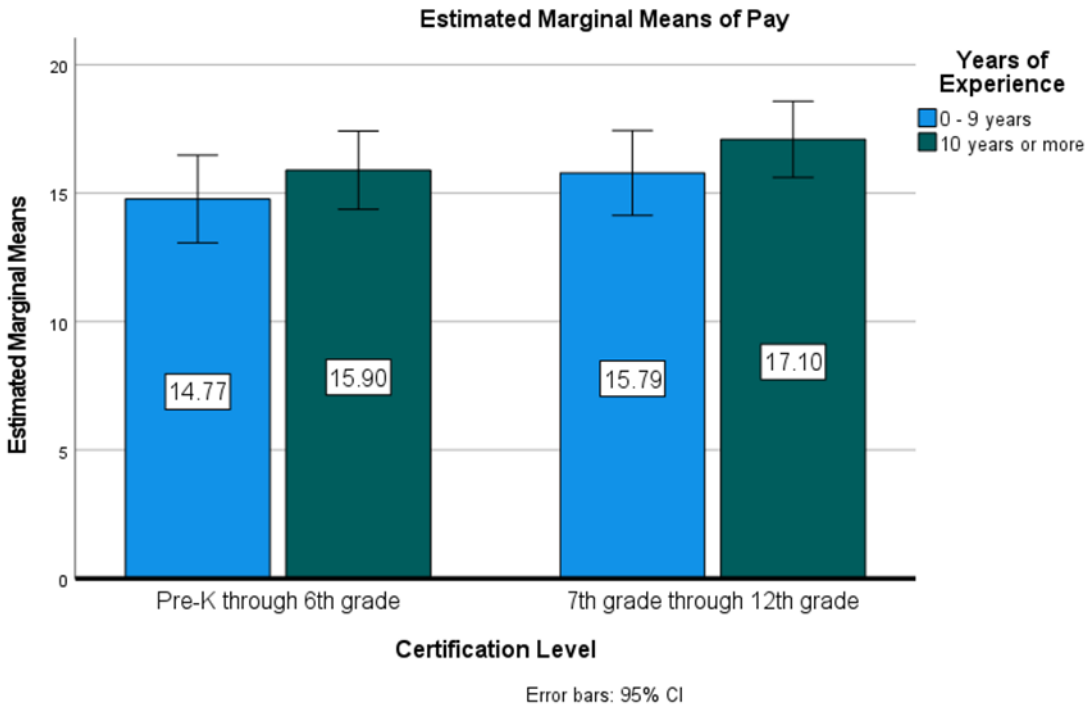
Note. Yrs of Exp = Years of Experience; Cert Level = Certification Levels.

The results of the factorial ANOVA analysis indicated no significant interaction effect between years of experience and certification level, $F(1, 140) = 0.01$, $p = .908$, *ES*

= 0.000, which is a small effect size (Cohen, 1988). Because no interaction effect existed, the main effect variables were analyzed separately. The main effect for years of experience was not significant, $F(1, 140) = 2.27$, $p = .134$, $ES = 0.016$, which was a small effect size. Similarly, the main effect for certification levels were not significant, $F(1, 140) = 1.88$, $p = .172$, $ES = 0.013$, which was a small effect size. Figure 3 displays the means for the perceptions of pay as a function of certification levels and years of experience.

Figure 3

Means for Lester TJSQ Perceived Pay by Certification Levels and Years of Experience



Regarding the main effect of years of experience, regardless of certification levels, the mean of perceived pay of the 10 years or more group ($M = 16.51$, $SD = 5.19$) was higher but not statistically different than the mean of 0 to 9 years group ($M = 15.30$,

SD = 4.28). The results indicated that experience, regardless of certification levels, was not a significant factor on perceptions of pay. Regarding certification levels, regardless of years of experience, the mean of the 7th-12th-grade group (*M* = 16.51, *SD* = 4.98) was higher but not significantly different from the PK–6th-grade group (*M* = 15.40, *SD* = 4.63). The results indicated that certification levels, regardless of years of experience, were not a significant factor on perceptions of pay. Therefore, the null hypotheses for the interaction effect and the two main effects were retained.

Hypothesis 2

Hypothesis 2 stated that no significant difference would exist by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of supervision measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas. A 2 x 2 factorial ANOVA was conducted to test this hypothesis. Before conducting the statistical analysis for the factorial ANOVA, data were screened for entry errors and missing values, with none found. The data were also checked for outliers, assumptions of independence of observations, assumptions of normality, and homogeneity of variances. Descriptive statistics and inferential results were also reviewed. Table 3 illustrates the group means, standard deviations, and *n* values of the perceptions of supervision as a function of certification levels and years of experience.

Table 3

Means, Standard Deviations, and Number for Perceived Supervision on Lester TJSQ by Certification Levels and Years of Experience

	Years of Experience								
	0-9 Years			10 or more Years			Total		
Cert Level	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*
PK-6	49.42	10.00	31	50.49	9.21	39	50.01	9.51	70
7-12	44.79	10.76	33	47.05	10.57	41	46.04	10.65	74
Total	47.03	10.58	64	48.73	10.02	80			

Note. Cert Level = Certification Levels.

To test the assumptions of normality, outliers were checked, and no extreme outliers were detected. The Shapiro-Wilk statistics and histograms were examined for each group. The skewness and kurtosis values were outside the 1.0 and -1.0 range for one of the four groups. The Shapiro-Wilks test was used to test for normality for the four groups: 0-9 years PK-6, $W(31) = 0.90$, $p = .008$; 0-9 years 7-12, $W(33) = 0.96$, $p = .247$; 10 or more years PK-6, $W(39) = 0.94$, $p = .047$; and 10 or more years 7-12, $W(41) = 0.94$, $p = .027$. All the groups had a negative skew, and three or four groups violated normality. Despite this violation, ANOVA was deemed appropriate as this is considered robust to violations of the assumption of normality (Leech et al., 2015). Levene's test of equality of variances was conducted within the ANOVA, and the test indicated that homogeneity of variances across the groups could be assumed, $F(3, 140) = 0.60$, $p = .619$; therefore, this assumption was not violated. A 2 x 2 factorial between-groups ANOVA was

performed to test the interaction effect between certification levels and years of experience on the Lester TJSQ for perceptions of supervision. The results of the ANOVA are displayed in Table 4.

Table 4

Factorial Analysis of Variance Results for Lester TJSQ Perceived Supervision Scores as a Function of Certification Levels and Years of Experience

Source	*SS*	*df*	*MS*	*F*	*p*	*ES*
Yrs of Exp	98.41	1	98.41	0.96	.330	0.007
Cert Level	578.40	1	578.40	5.62	.019	0.039
Exp*Cert Level	12.64	1	12.64	0.12	.726	0.001
Error	14398.71	140	102.85			

R Squared = .045 (Adjusted *R Squared* = .025).

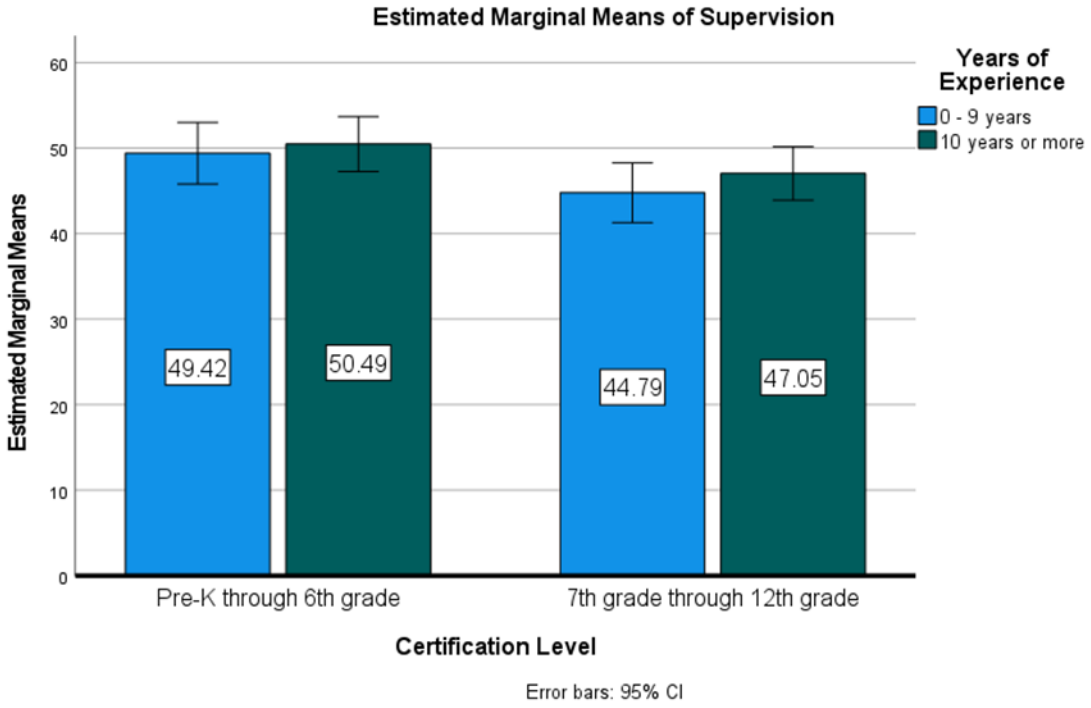
Note. Yrs of Exp = Years of Experience; Cert Level = Certification Levels.

The results of the factorial ANOVA analysis indicated no significant interaction effect between years of experience and certification levels, $F(1, 140) = 0.12$, $p = .726$, $ES = 0.001$, which is a small effect size (Cohen, 1988). Because no interaction effect existed, the main effect variables were analyzed separately. The main effect for years of experience was not significant, $F(1, 140) = 0.96$, $p = .330$, $ES = 0.007$, which was a small effect size. In contrast, the main effect for certification levels was significant, $F(1, 140) = 5.62$, $p = .019$, $ES = 0.039$, which was a small effect size. Figure 4 displays the

means for the perceptions of supervision as a function of certification levels and years of experience.

Figure 4

Means for Lester TJSQ Perceived Supervision by Certification Levels and Years of Experience



Regarding the main effect of years of experience, regardless of certification levels, the mean of perceived supervision of the 10 years or more group (M = 48.73, SD = 10.02) was higher but not statistically different compared to the mean of 0 to 9 years group (M = 47.03, SD = 10.58). The results indicated that experience, regardless of certification levels, was not a significant factor on perceptions of supervision. Regarding certification levels, regardless of years of experience, the mean of the PK-6th-grade group (M = 50.01, SD = 9.51) was significantly higher than the 7th-12th-grade group (M

= 46.04, *SD* = 10.65). Therefore, the null hypotheses for the interaction effect and the main effect for years of experience were retained. However, the null hypothesis for the main effect for certification levels was rejected.

Hypothesis 3

Hypothesis 3 stated that no significant difference would exist by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of colleagues measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas. A 2 x 2 factorial ANOVA was conducted to test this hypothesis. Before conducting the statistical analysis for the factorial ANOVA, data were screened for entry errors and missing values, with none found. The data were also checked for outliers, assumptions of independence of observations, assumptions of normality, and homogeneity of variances. Descriptive statistics and inferential results were also reviewed. Table 5 illustrates the group means, standard deviations, and *n* values of the perceptions of pay as a function of certification levels and years of experience.

Table 5

Means, Standard Deviations, and Number for Perceived Colleagues on Lester TJSQ by Certification Levels and Years of Experience

	Years of Experience								
	0-9 Years			10 or more Years			Total		
Cert Level	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*
PK-6	37.29	4.43	31	39.33	3.52	39	38.43	4.05	70
7-12	36.78	4.26	32	37.41	3.62	41	37.14	3.90	73
Total	37.03	4.31	63	38.35	3.68	80			

Note. Cert Level = Certification Levels.

To test the assumptions of normality, outliers were checked, and one extreme outlier was deleted. The pre-analysis was a rerun, and the Shapiro-Wilk statistics and histograms were examined for each group. The skewness and kurtosis values were outside the 1.0 and -1.0 range for one of the four groups. The Shapiro-Wilks test was used to test for normality for the four groups: 0-9 years PK-6, $W(31) = 0.98$, $p = .706$; 0-9 years 7-12, $W(32) = 0.96$, $p = .197$; 10 or more years PK-6, $W(39) = 0.92$, $p = .011$; and 10 or more years 7-12, $W(41) = 0.97$, $p = .362$. All the groups had a negative skew except for one group. Only one group, 10 or more years PK-6, violated normality. Despite this violation, ANOVA was deemed appropriate as this is considered robust to violations of the assumption of normality (Leech et al., 2015). Levene's test of equality of variances was conducted within the ANOVA, and the test indicated that homogeneity of variances across the groups could be assumed, $F(3, 139) = 0.41$, $p = .747$; therefore, this assumption was not violated. A 2 x 2 factorial between-groups ANOVA was performed

to test the interaction effect between certification levels and years of experience on the Lester TJSQ for perceptions of colleagues. The results of the ANOVA are displayed in Table 6.

Table 6

Factorial Analysis of Variance Results for Lester TJSQ Perceived Colleagues Scores as a Function of Certification Levels and Years of Experience

Source	*SS*	*df*	*MS*	*F*	*p*	*ES*
Yrs of Exp	63.09	1	63.09	4.09	.045	0.029
Cert Level	51.91	1	51.91	3.37	.069	0.024
Exp*Cert Level	17.50	1	17.50	1.13	.289	0.008
Error	2144.47	139	15.43			

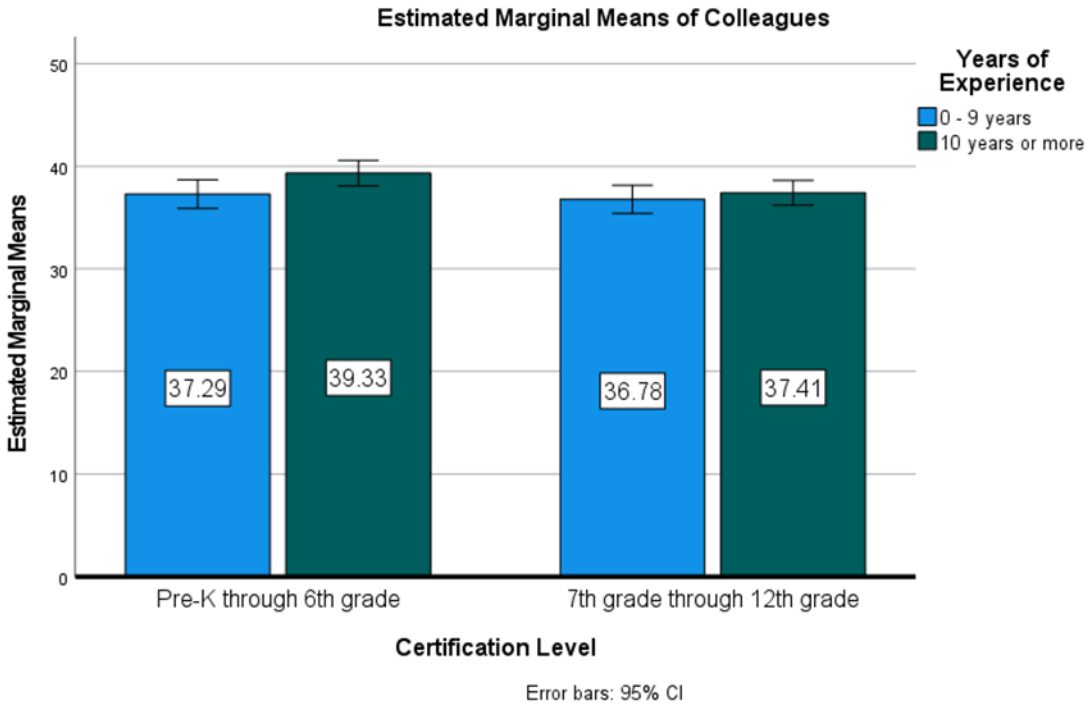
R Squared = .061, (Adjusted *R Squared* = .04).

Note. Yrs of Exp = Years of Experience; Cert Level = Certification Levels.

The results of the factorial ANOVA analysis indicated no significant interaction effect between years of experience and certification levels, $F(1, 139) = 1.13$, $p = .289$, $ES = 0.008$, which is a small effect size (Cohen, 1988). Because no interaction effect existed, the main effect variables were analyzed separately. The main effect for years of experience was significant, $F(1, 139) = 4.09$, $p = .045$, $ES = 0.029$, which was a small effect size. In contrast, the main effect for certification levels was not significant, $F(1, 139) = 3.37$, $p = .069$, $ES = 0.024$, which was a small effect size. Figure 5 displays the means for the perceptions of colleagues as a function of certification levels and years of experience.

Figure 5

Means for Lester TJSQ Perceived Colleagues by Certification Levels and Years of Experience



Regarding the main effect of years of experience, regardless of certification levels, the perceptions of colleagues mean of the 10 years or more group (M = 38.35, SD = 3.68) was statistically higher compared to the mean of 0 to 9 years group (M = 37.03, SD = 4.31). The results indicated that experience, regardless of certification levels, was a significant factor on the perceptions of colleagues. Regarding certification levels, regardless of years of experience, the mean of the PK-6th-grade group (M = 38.43, SD = 4.05) was higher but not statistically different compared to the 7th-12th-grade group (M = 37.14, SD = 3.90). Therefore, the null hypotheses for the interaction effect and the main effect for certification levels were retained. However, the null hypothesis for the main effect for years of experience was rejected.

Hypothesis 4

Hypothesis 4 stated that no significant difference would exist by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of working conditions measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas. A 2 x 2 factorial ANOVA was conducted to test this hypothesis. Before conducting the statistical analysis for the factorial ANOVA, data were screened for entry errors and missing values, with none found. The data were also checked for outliers, assumptions of independence of observations, assumptions of normality, and homogeneity of variances. Descriptive statistics and inferential results were also reviewed. Table 7 illustrates the group means, standard deviations, and *n* values of the perceptions of working conditions as a function of certification levels and years of experience.

Table 7

Means, Standard Deviations, and Number for Perceived Working Conditions on Lester TJSQ by Certification Levels and Years of Experience

	Years of Experience								
	0-9 Years			10 or more Years			Total		
Cert Level	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*
PK-6	22.23	4.48	31	23.23	4.08	39	22.79	4.26	70
7-12	21.45	4.62	33	21.93	4.42	41	21.72	4.49	74
Total	21.83	4.54	64	22.56	4.28	80			

Note. Cert Level = Certification Levels.

To test the assumptions of normality, outliers were checked, and no extreme outliers were detected. The Shapiro-Wilk statistics and histograms were examined for each group. The skewness and kurtosis values were outside the 1.0 and -1.0 range for none of the four groups. The Shapiro-Wilks test was used to test for normality for the four groups: 0-9 years PK-6, $W(31) = 0.98$, $p = .719$; 0-9 years 7-12, $W(33) = 0.98$, $p = .707$; 10 or more years PK-6, $W(39) = 0.97$, $p = .444$; and 10 or more years 7-12, $W(41) = 0.98$, $p = .602$. All the groups had a negative skew except for one, but no group violated normality. Levene's test of equality of variances was conducted within the ANOVA, and the test indicated that homogeneity of variances across the groups could be assumed, $F(3, 140) = 0.33$, $p = .803$; therefore, this assumption was not violated. A 2 x 2 factorial between-groups ANOVA was performed to test the interaction effect between certification levels and years of experience on the Lester TJSQ for perceptions of working conditions. The results of the ANOVA are displayed in Table 8.

Table 8

Factorial Analysis of Variance Results for Lester TJSQ Perceived Working Condition Scores as a Function of Certification Levels and Years of Experience

Source	*SS*	*df*	*MS*	*F*	*p*	*ES*
Yrs of Exp	19.38	1	19.38	1.01	.318	0.007
Cert Level	38.25	1	38.25	1.98	.161	0.014
Exp*Cert Level	2.52	1	2.52	0.13	.718	0.001
Error	2701.31	140	19.30			

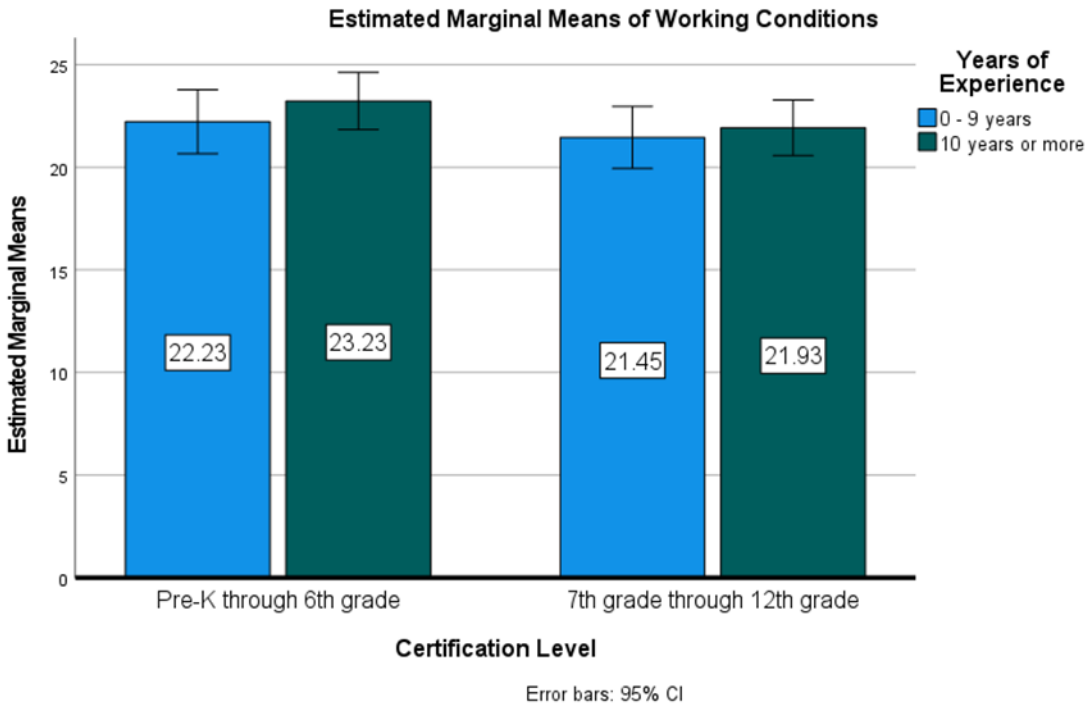
R Squared = .023 (Adjusted *R Squared* = .002).

Note. Yrs of Exp = Years of Experience; Cert Level = Certification Levels.

The results of the factorial ANOVA analysis indicated no significant interaction effect between years of experience and certification level, $F(1, 140) = 0.13$, $p = .718$, $ES = 0.001$, which is a small effect size (Cohen, 1988). Because no interaction effect existed, the main effect variables were analyzed separately. The main effect for years of experience was not significant, $F(1, 140) = 1.01$, $p = .318$, $ES = 0.007$, which was a small effect size. Similarly, the main effect for certification levels was not significant, $F(1, 140) = 1.98$, $p = .161$, $ES = 0.014$, which was a small effect size. Figure 6 displays the means for the perceptions of working conditions as a function of certification levels and years of experience.

Figure 6

Means for Lester TJSQ Perceived Working Conditions by Certification Levels and Years of Experience



Regarding the main effect of years of experience, regardless of certification level, the mean of perceived working conditions of the 10 years or more group (M = 22.56, SD = 4.28) was higher but not statistically different compared to the mean of 0 to 9 years group (M = 21.83, SD = 4.54). The results indicated that experience, regardless of certification levels, was not a significant factor on perceptions of working conditions. Regarding certification levels, regardless of years of experience, the mean of the PK-6th-grade group (M = 22.79, SD = 4.26) was higher but not significantly different from the 7th-12th-grade group (M = 21.72, SD = 4.49). The results indicated that certification levels, regardless of years of experience, were not a significant factor on the perceptions of working conditions. Therefore, the null hypotheses for the interaction effect and the two main effects were retained.

Summary

The purpose of the study was to determine the effects by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of pay, supervision, colleagues, and working conditions as measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas. Table 9 includes a summary of the results of the interactions and main effects of the four hypotheses.

Table 9

Summary of Statistical Significance of Certification Levels and Years of Experience on Perception of Pay, Supervision, Colleagues, and Working Conditions by Hypothesis

Variables by H_0	H1	H2	H3	H4
Years of Experience	.134	.330	.045	.318
Certification Level	.172	.019	.069	.161
Experience*Certification Level	.908	.726	.289	.718

Overall, certification levels and years of experience did not interact to significantly affect the perceptions of pay, supervision, colleagues, or working conditions for the four hypotheses. Further, the main effect of years of experience only significantly affected the perceptions of colleagues, with the mean of the 10 years or more group statistically higher compared to the mean of 0 to 9 years group. Years of experience did not significantly affect the perceptions of pay, supervision, or working conditions. In addition, the main effect of certification levels only significantly affected the perceptions of supervision, with the mean of the PK-6th-grade group significantly higher than the 7th-12th-grade group. Certification levels did not significantly affect the perceptions of pay, colleagues, or working conditions. Chapter V discusses the findings, implications, recommendations, potential for practices, and future research considerations.

CHAPTER V

DISCUSSION

The purpose of this study was to research teachers' perceptions of job satisfaction factors in relation to teacher retention. Flowers (2019) surmised that job satisfaction is key to improving teacher retention. Flowers supported O'Reilly's (2014) finding that a significant correlation exists between job satisfaction and retention. District and building leaders who understand that job satisfaction factors represent teachers' needs that correlate with Maslow's (1943) theory of motivation and the hierarchy of needs can influence retention in their schools. Fisher and Royster's (2016) hierarchy of needs for teachers further adds to the research. This study was conducted to determine teachers' perceptions of four job satisfaction factors (pay, supervision, colleagues, and working conditions) in small rural school districts in West-Central Arkansas. This chapter summarizes the four hypotheses and statistics regarding teachers' perceptions of the factors of pay, supervision, colleagues, and working conditions. This chapter aligns the study's findings with research on how these factors affect retention. Additionally, the implications of the perceived factors on teacher retention are discussed, and recommendations are provided to increase teacher retention.

Findings and Implications

This study aimed to determine by certification level the effects of 0–9 years of teaching experience versus 10 years or more of teaching experience on perceptions of

pay, supervision, colleagues, and working conditions as measured by the Lester TJSQ. Four 2 x 2 factorial ANOVAs computed the four hypotheses. The independent variables for the hypotheses were certification level (PK through 6th grade and 7th through 12th grade) and years of experience (0-9 years and 10 years or more). The dependent variables for the four hypotheses were pay, supervision, colleagues, and working conditions. Teacher perception of the dependent variables may be used by school leaders to effect teacher retention.

Perceptions of Pay

The first hypothesis of this study stated that no significant difference will exist by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of pay measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas. The analysis of this hypothesis indicated that the interaction between certification level and years of experience did not significantly affect teachers' perception of pay. Although a 2.33-point difference in perception of pay was found between the group with the lowest mean, PK-6 with 0-9 years of experience, and the group with the highest mean, 7-12 with 10 years or more of experience, the difference was not statistically significant. This finding may contradict Gotte (2019), who found that Arkansas teachers said that pay was a challenge. Pay assists in providing the basic needs of life, which according to Maslow's (1943) hierarchy of needs, are food, water, shelter, and safety. However, Oke et al. (2016) reported that teachers did not enter the teaching profession expecting to make much money, which supports the study's results that the combination of teachers' certification level and years of experience on the variables individually did not affect teachers' perception of pay.

However, regardless of certification level or years of experience, the State of Arkansas Bureau of Legislative Research (2020a) reported that of the 23.9% of Arkansas teachers surveyed who indicated they considered transferring schools or districts, 43.8% listed higher pay as a reason for leaving their current district. Almost half of Arkansas teachers considering a change in teaching location listed pay as a reason. Teacher pay provides the basic needs of life and may be a challenge; however, teachers enter the profession aware of the limited pay. Intrinsic factors may be more influential to teacher job satisfaction when pay is not a significant factor.

When comparing means of years of experience, regardless of the certification level, the perception of pay for teachers with 10 years or more of experience was higher than for teachers with 0-9 years of experience but not significantly. Although Chiong et al. (2017) did not find pay significant, pay was less critical to retaining long-term teachers with 10 or more years of experience. Additionally, Taylor et al. (2014) determined that extrinsic factors, such as pay, were less critical the more years the teacher was in education but significantly more important to new teachers. Chiong et al. (2017) and Taylor et al. (2014) found pay more significant for those with fewer years of experience. These findings contradict this study's results about the importance of pay for teachers with extended years in the teaching profession.

Perceptions of Supervision

The second hypothesis of this study stated that no significant difference will exist by teacher certification levels between 0 to 9 years of experience versus 10 years or more on perceptions of supervision measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas. The analysis of this study

indicated that certification level and years of experience did not significantly combine to affect teachers' perceptions of supervision. The effect size for this interaction was small. Although a 5.70-point difference was found in perceived supervision between the group with the lowest mean, 7-12 with 0-9 years of experience, and the group with the highest mean, PK-6 with 10 years or more of experience, the difference was not statistically significant. Positive relationships between a supervisor (school leader) and a teacher promote respect. Maslow (1943) associated respect with esteem and added that everyone needs and wants esteem. When considering perceived supervision aligned with teacher retention, the State Arkansas Bureau of Legislative Research (2020a) indicated that 31.7% of teachers stated that seeking more vital leadership was a reason for considering transferring to another district. In Arkansas, almost one-third of the teachers were influenced by supervision when considering retention. However, the combined effect of certification level and years of experience in small rural schools in Arkansas did not significantly affect teachers' perceptions of supervision.

The results of this study indicated that certification level had a significant main effect on perceived supervision, and years of experience did not have a significant main effect. When comparing the means of certification level, the perceived supervision of teachers with PK-6 was higher than 7-12. No studies in the literature review were found to support or not support this finding. When comparing the means for years of experience, the mean for 10 years or more experience was higher than the mean of 0-9 years of experience. This finding that the mean of supervision for teachers with 10 years or more of experience opposes Boyd et al. (2011), who determined that 40% of the teachers who left after their first year of teaching and those who had considered leaving

in the first year, indicated that leadership satisfaction was the main reason for leaving or considering leaving their current position. Boyd et al. cited teachers in their first year of teaching experience in this study compared to 0-9 years of experience, which may contribute to differing results. However, long-term teachers in five small rural schools in Arkansas revealed that supervision quality was more important to teachers with more experience.

Perceptions of Colleagues

The third hypothesis of this study is that no significant difference will exist by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of colleagues measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas. The analysis of this study indicated that certification level and years of experience did not significantly interact to affect teachers' perceptions of colleagues. Although a 2.55 difference was found in perceived colleagues between the group with the lowest mean, 7-12 with 0-9 years of experience, and the group with the highest mean, PK-6 with 10 or more years of experience, the difference was not significant. Colleagues are vital because bonds form relationships between teachers that provide a sense of belongingness, which Maslow (1943) said was essential. Hylton and Vu (2021) found that relationship-building increases retention. Though the results did not indicate that perceptions of colleagues were affected by the interaction of certification level and years of experience, researchers indicated that a sense of belonging is critical. Relationships may affect job satisfaction and teacher retention.

The results of this study revealed that years of experience were a significant factor in the perceptions of colleagues. The mean for 10 years or more of experience was significantly higher than the mean for 0-9 years of experience. However, Fry and Anderson (2011) noted that new teachers have a challenging first year without a mentoring relationship with a colleague. Moreover, Miller et al. (2020) said that promoting professional relationships with new teachers was vital for teacher retention. Fry and Anderson's (2011) and Miller et al.'s (2020) findings indicated the importance of professional relationships with colleagues, especially with teachers with fewer years of experience. While not a significant factor, collegial relationships were more critical for PK-6 teachers than 7-12 teachers. Though the mean for PK-6 was slightly higher, Yavuzket and Kiral (2020) concluded a positive relationship between secondary teachers' perceptions of friendship opportunities with colleagues and job satisfaction. The positive relationship predicted job satisfaction. Colleagues support new teachers and create positive relationships for teachers of all years of experience. Supporting relationship building can result in teacher retention.

Perceptions of Working Conditions

The fourth hypothesis of this study states that no significant difference will exist by teacher certification levels will exist by teacher certification levels between 0 to 9 years versus 10 years of more on the perceptions of working conditions measured by TJSQ. The analysis of this hypothesis indicated that the certification level and years of experience did not significantly combine to affect teachers' perception of working conditions. Although a 1.78-point difference was found in perceived working conditions between the group with the lowest mean, 7-12 with 0-9 years of experience, and the

group with the highest mean, PK-6 with 10 or more years of experience, the difference was not statistically significant. The effect size for this interaction was small. Maslow (1943) said that people want a safe and orderly world. Reaves and Cozzens (2018) agreed with Maslow and added that teachers working in a safe and orderly school have increased intrinsic motivation and may be more inclined to remain in their current positions. PK-6 teachers with 10 or more years of experience rated working conditions of greater concern than other teacher groups. The findings of this study did not indicate that working conditions was a significant factor in teacher perception of job satisfaction.

Comparing years of experience on perceptions of working conditions revealed that the mean of the 10 years of more group was higher than the mean of 0-9 years. Comparing certification levels on perceptions of working conditions revealed that the mean for PK-6 was higher than 7-12. However, both results were not significantly different. When aligning this discovery with research on teacher retention, a survey by the National Center for Education Statistics (2019) indicated that 90% of lower secondary teachers in the United States agreed or strongly agreed that they were satisfied with their jobs; however, 49% of them were dissatisfied with their jobs when surveyed about challenging working conditions. This study revealed no significant effect on perceptions of working conditions, but Gunther (2019) suggested that lower pay could be offset by improving working conditions. As years of experience increase, a slight increase on the perception of working conditions on job satisfaction existed. Additionally, the PK-6 certification level has a more positive perception of working conditions on job satisfaction. Administrators should be aware of job satisfaction factors that working conditions may offset.

Implications

After completing this study on teachers' perceptions of job satisfaction factors, implications were discovered through the analyses. Leaders within schools should recognize that teacher perceptions of these factors motivate teacher behavior, leading to decisions to remain in or leave a small rural school district. Additionally, these factors are perceived differently by certification level and at different points in a teacher's career (Fisher & Royster, 2016). However, in this study, all but two of the factors were not found to be signification. Job satisfaction factors represent teachers' needs; if needs are not met, job satisfaction may decline. Maslow's (1943) theory of motivation and the hierarchy of needs may help school leaders fully realize the influence of job satisfaction factors on teacher retention. A review of Fisher and Royster's (2016) hierarchy of needs for teachers will further demonstrate how the hierarchy of needs and teacher job satisfaction factors align. Holmes et al. (2019) explained that once school leaders understand factors within their schools that positively or negatively affect teacher job satisfaction, they can work to improve the factors. This understanding can be achieved through various pathways such as teacher surveys regarding the factors, needs assessments, and purposefully building relationships with teachers to learn what is important to them. Hughes et al. (2015) said leaders need to realize how leader support influences teacher job satisfaction and retention. The significant findings of this study support the research of Holmes et al. and Hughes et al.

Another finding is the importance of colleagues to teacher job satisfaction. Yavuzkert and Kiral (2020) said that perceptions of friendship opportunities lead to job satisfaction. Within rural schools, providing a mentoring relationship to new teachers can

be vital to retaining new teachers, especially when the new teacher is not familiar with the rural setting. School leaders who understand this importance will strategically provide opportunities for relationships between the leader and the teacher and between teachers.

Recommendations

Potential for Practice and Policy

This study focused on differences by certification level and years of experience on teachers' perceptions of job satisfaction factors. The findings revealed slight differences between PK through 6th grade and 7th through 12th grade and 0–9 years of experience and 10 years or more experience. The following recommendations are provided to inform educational practice and policy and ensure that teachers' needs are assessed so that school leaders can manage job satisfaction factors within their schools.

1. To maximize the colleague job satisfaction factor, hiring practices for 7-12 teachers should consider the importance of colleagues at the 7-12 certification level through personal and professional fit for the open position. The hiring rubric could include an item that considers the fit. Miller et al. (2020) said that having shared values and professional goals are essential.
2. School district leadership should develop relationship-building strategies for new and experienced teachers. New teacher orientation may help to begin the relationship-building process as soon as new teachers are hired. Strategic class scheduling for 7-12 teachers may promote relationship building, especially in rural schools where isolation may exist. These strategies may increase the sense of belonging that Fisher and Royster (2016) indicated was important.

3. School leaders should receive training on the relationship between job satisfaction factors and Maslow's hierarchy of needs. This training may be delivered through leadership preparation programs or professional development as a new leader training. Fisher and Crawford (2020) contended that this knowledge could promote significant change for educators and the schools in which they teach.
4. Rural school districts need to be purposeful in hiring leaders with rural education experience. If a candidate with rural experience is unavailable, then training should be provided about the challenges of working in a rural environment. Tran and Dou (2019) suggested that rural administrators develop their strengths in supporting rural teachers and suggested rural-specific training that may promote commitments to the rural district. Additionally, the knowledge of working in rural schools will allow the school leader to support long-term teachers within the rural setting and support teachers new to the rural district.
5. The development of policies to provide support to school leaders is necessary. Supervision (leadership) influences teacher job satisfaction and retention. Policies for improving leadership may increase retention (Boyd et al., 2011). If high turnover rates are an issue, the district should not overlook the possibility that leadership could be a part of the issue, and efforts may need to focus on improving the building leadership. Pechota et al. (2020) indicated that some states are developing policies to support district and school leaders throughout their careers. This support may be beneficial as

long-term leaders see the different generations of teachers working in their schools. Barnes (2017) suggested that schools invest more resources into developing their leaders by making this strategy a part of the strategic planning process.

6. Districts should consider implementing programs to increase teacher retention. At the local level, a district may develop a program to integrate new teachers unfamiliar with the rural lifestyle (Barton, 2012). The Educator's Rising Arkansas Program through the Arkansas Division of Elementary and Secondary Education (2022) provides a pathway similar to other states' grow-your-own-teacher programs. These programs identify and support students within the school district who are interested in education. These programs inspire teachers to return *home* to teach in a place they are familiar with and possibly remain in for a long time.
7. Colleges and universities should be purposeful in providing training for all school cultures, including rural schools. Certo and Fox (2002) found that teacher internships do not adequately prepare future educators for the actual teaching position. Van Overschelde et al. (2017) described a program at Texas State University where professors, preservice teachers, and the mentoring teacher collaborate for two semesters allowing preservice teachers time to adjust to different cultures.
8. Policymakers must look at rural schools' challenges and the students they serve (Showalter et al., 2019). When these challenges have been identified, efforts should be made to decrease the magnitude of the challenge presented

to teachers. These efforts may equate to fewer challenges for teachers and increased retention.

Future Research Considerations

The findings in this study support some of the current literature about certification level, years of experience, and teacher perceptions of pay, supervision, colleagues, and working conditions. However, additional research and studies are necessary to examine job satisfaction and the effects on teacher retention. The following are considerations for further study:

1. Extending the research to other rural schools in Arkansas will provide a broader study of teacher retention by including all regions of the state. Much of the research presented in this study were from states other than Arkansas. A clearer view of teachers' perceptions of job satisfaction factors throughout the state may lead to changes statewide for all rural educators. This extension will also solicit a larger sample of rural educators to participate in the study.
2. A study on the effectiveness of rural school leaders with a rural background compared to nonrural experiences may provide data to support teacher retention. The data collected on the effectiveness of leaders with rural background experience may determine that a grow-your-own-administrator program could be as effective as a grow-your-own-teacher program for retaining rural administrators.
3. A study of other factors affecting teacher retention in rural schools may identify additional areas to consider. Lester (1987) listed nine factors of teacher retention: pay, supervision, colleagues, working conditions,

advancement, work itself, responsibility, recognition, and security. A study examining and prioritizing these factors' significance to Arkansas teachers may benefit the state and local levels.

4. A study of PK-6 teachers may determine which leadership factors are most important at that certification level. School leaders can use this information to grow their skills.
5. A study of 7-12 teachers about why collegial relationships are meaningful may help to build retention in upper-grade level teachers. The results of this study may help determine strategies to build and support relationships at this level.

Conclusion

Teachers' perceptions of job satisfaction factors may determine teachers' needs within the school district and how these factors affect teacher retention. The hypotheses that were analyzed stated that no significant difference would exist by teacher certification levels between 0 to 9 years of experience versus 10 years or more on the perceptions of pay, supervision, colleagues, and working conditions measured by the Lester TJSQ for PK through 12th-grade teachers in five small rural schools in West-Central Arkansas. When analyzed together, certification level and years of experience did not significantly interact to affect teachers' perceptions of pay, supervision, colleagues, or working conditions. However, when the variables were examined individually, certification level significantly affected teachers' perceptions of supervision. Overall, PK-6 teachers were more satisfied with supervisory practices than 7-12 teachers. Additionally, years of experience did significantly affect teachers' perceptions of

colleagues. Teachers with 10 or more years of experience had a higher mean than teachers with 0-9 years of experience. These results implied that school leader support and colleagues affect teacher job satisfaction.

A leader aware of factors that positively and negatively influence teachers' perceptions of job satisfaction based on supervision may promote these positive factors and build their capacity to improve the negative factors. Also, school leaders who understand the importance of colleagues to teachers' job satisfaction should be purposeful in building relationships between and with teachers. The overall implication of the two significant findings in the study is that school leaders provide opportunities to build relationships between the school leader and the teacher and between teachers. When teachers' needs are analyzed through Maslow's (1943) hierarchy of needs and understand how these needs affect teacher job satisfaction, school and district leaders can strategically use the findings to promote teacher retention in small rural school districts.

REFERENCES

Adnot, M., Dee, T., Katz, V., & Wyckoff, J. (2017). *Teacher turnover, teacher quality, and student achievement in DCPS* (ED577321). ERIC. https://files.eric.ed.gov/fulltext/ED577321.pdf

Ali, W. (2016). Understanding the concept of job satisfaction, measurements, theories and its significance in the recent organizational environment: A theoretical framework. *Archives of Business Research, 4*(1), 100-111. https://journals.scholarpublishing.org/index.php/ABR/article/view/1735/1012

Ansley, B. M., Houchins, D., & Varjas, K. (2019). Cultivating positive work contexts that promote teacher job satisfaction in high-need schools. *Archives of Business Research, 4*(1). 100-111 (EJ1274904). ERIC. https://files.eric.ed.gov/fulltext/EJ1274904.pdf

Arkansas Department of Education. (2020). *Guidance for schools regarding COVID-19.* https://adecm.ade.arkansas.gov/ViewApprovedMemo.aspx?id=4328

Arkansas Division of Elementary and Secondary Education. (2021a). *Arkansas K-12 profile: 2021-2022*. https://adedata.arkansas.gov/Ark12

Arkansas Division of Elementary and Secondary Education. (2021b). *Tier I annual update, fiscal year 2022.* https://dese.ade.arkansas.gov/Files/Tier_I_Training_Presentation_2021-2022_20210608143142.pdf

Arkansas Division of Elementary and Secondary Education. (2022). *Educators Rising Arkansas*. https://sites.google.com/pdarkansas.net/edrisingarkansas/home

Barnes, J. M. (2019). *Teacher's values: An international study of what sustains a fulfilling life in education Journal of Education and Training Studies, 7*(5), 1-18 (EJ1210774). ERIC. https://files.eric.ed.gov/fulltext/EJ1210774.pdf

Barnes, S. S. (2017). *Teachers quit principals, not schools*. Indy K12. https://indy.education/2017/03/13/2017-3-13-teachers-quit-principals-not-schools/

Barton, R. (2012). Recruiting and retaining rural educators: Challenges and strategies. *Principal's Research Review*, *7*(6), 1-6. https://educationnorthwest.org/sites/default/files/resources/Principal%E2%80%99s%20Research%20Review%2C%20November%202012.pdf

Blair, E. (2017). Teaching in the country: A critical analysis of the experiences of rural teachers in the United States and Jamaica. *Counterpoints, 494*(1), 323-340. http://www.jstor.org/stable/45177669

Boyd, D., Grossman, P., Ing, M., Lankford, H., Loeb, S., & Wyckoff, J. (2011). *The influence of school administrators on teacher retention decisions*. National Center for Analysis of Longitudinal Data in Educational Research. https://www.urban.org/sites/default/files/publication/33386/1001287-The-Influence-of-School-Administrators-on-Teacher-Retention-Decisions.PDF

Bozeman, T. D., Scogin, S. S., & Stuessy, C. L. (2013). Job satisfaction of high school science teachers: Prevalence and association with teacher retention. *Electronic Journal of Science Education, 17*(4), 1-19 (EJ1188384). ERIC. https://files.eric.ed.gov/fulltext/EJ1188384.pdf

Brenner, D., Azano, A., & Downey, J. (2021). Helping new teachers stay and thrive in rural schools. *Phi Delta Kappan,103*(4), 14-18. https://kappanonline.org/new-teachers-stay-thrive-rural-brenner-azano-downey/

Burkhauser, S. (2017). How much do school principals matter when it comes to teacher working conditions? *Educational Evaluation and Policy Analysis*, *39*(1), 126-45. https://doi.org/10.3102/0162373716668028

Centers for Disease Control and Prevention. (2022). *CDC museum COVID-19 timeline*. https://www.cdc.gov/museum/timeline/covid19.html

Certo, J. L., & Fox, J. E. (2002). *Retaining quality teachers*. Metropolitan Educational Research Consortium. https://scholarscompass.vcu.edu/cgi/viewcontent.cgi?article=1049&context=merc_pubs

Chiong, C., Menzies, L., & Parameshwaran, M. (2017). Why do long-serving teachers stay in the teaching profession? Analyzing the motivations of teachers with 10 or more years' experience in England. *British Educational Research Journal, 43*(6), 1083-1110. https://bera-journals.onlinelibrary.wiley.com/doi/abs/10.1002/berj.3302

Cohen, J. (1988). *Statistical power analysis for behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Davis, M. S. (2002). *An investigation of factors related to teacher retention in small rural school districts in Montana* (ED472264). ERIC. https://files.eric.ed.gov/fulltext/ED472264.pdf

Derlikowski, J., & Williams, C. (2018). *Innovative regional support for community schools in rural Arkansas: A solution for student's home communities and schools.* Southern Education Foundation. https://policycommons.net/artifacts/1641717/innovative-regional-support-for-community-schools-in-rural-arkansas/2333754/

Diliberti, M., Schwartz, H. & Grant, D. (2021). *Stress topped the reasons why public school teachers quit, even before COVID-19*. RAND Corporation, 2021. https://www.rand.org/pubs/research_reports/RRA1121-2.html.

Dougan, M. B. (2018). *Elementary and secondary education*. Encyclopedia of Arkansas. https://encyclopediaofarkansas.net/entries/elementary-and-secondary-education-389/

Fisher, M. H., & Crawford, B. (2020). From school of crisis to distinguished: Using Maslow's hierarchy in a rural underperforming school. *Rural Educator, 41*(1), 8-19 (EJ1251459). ERIC. https://files.eric.ed.gov/fulltext/EJ1251459.pdf

Fisher, M. H., & Royster, D. (2016). Mathematics teachers' support and retention: Using Maslow's hierarchy to understand teachers' needs. *International Journal of Mathematics Education in Science and Technology*, *47*(7), 993-1008. https://meteoreducation.com/wp-content/uploads/Mathematics-Teachers-Support-and-Retention.pdf

Flowers, A. A., Jr. (2019). *The impact of declining teacher retention on a school system.* [Doctoral dissertation, Southern Wesleyan University] (ED601980). ERIC. https://files.eric.ed.gov/fulltext/ED601980.pdf

Flowers, V., & Hughes, C. (1973). *Why employees stay*. https://hbr.org/1973/07/why-employees-stay

Frahm, M., & Cianca, M. (2021). Will they stay or will they go? Leadership behaviors that increase teacher retention in rural schools. *The Rural Educator, 42*(3), 1-13. https://scholarsjunction.msstate.edu/ruraleducator/vol42/iss3/1/

Fry, S. W., & Anderson, H. (2011). Career changers as first-year teachers in rural schools. *Journal of Research in Rural Education, 26*(12), 1-15. https://scholarworks.boisestate.edu/cgi/viewcontent.cgi?referer=https%253A%252F%252Fscholar.google.com%252Fscholar%253Fq%253D%2522collegial%2520relationships%2522%2520%2526%2520rural%2520schools&=&hl=en&=&as_sdt=0&=&as_vis=1&=&oi=scholart&=&httpsredir=1&=&article=1090&=&context=cifs_facpubs&=&sei-redir=1#search=%22collegial%20relationships%22

Garcia, E., & Weiss, E. (2019a). *Challenging working environments ("school climates"), especially in high-poverty schools, play a role in the teacher shortage. The fourth report in "The perfect storm in the teacher labor market" series* (ED598207). ERIC. https://files.eric.ed.gov/fulltext/ED598207.pdf

Garcia, E., & Weiss, E. (2019b). *U.S. schools struggle to hire and retain teachers. The second report in "The perfect storm in the teacher labor market" series*. Economic Policy Institute. https://www.epi.org/publication/u-s-schools-struggle-to-hire-and-retain-teachers-the-second-report-in-the-perfect-storm-in-the-teacher-labor-market-series/

Gotte, E. (2019). *Retaining special education teachers in a rural Arkansas school district* [Doctoral dissertation, University of Arkansas] University of Arkansas Scholar

Works. https://scholarworks.uark.edu/cgi/viewcontent.cgi?article=5038&context=etd

Grissom, J. A., & Bartanen, B. (2019). Strategic retention: Principal effectiveness and teacher turnover in multiple measure teacher evaluation systems. *American Educational Research Journal, 56*(2), 514-555. https://journals.sagepub.com/doi/pdf/10.3102/0002831218797931

Gunther, J. (2019). Quantifying the value teachers place on nonmonetary factors when evaluating job opportunities. *Education Policy Analysis Archives*, *27*(45), 2-34 (EJ1216676). ERIC. https://files.eric.ed.gov/fulltext/EJ1216676.pdf

Holmes, B., Parker, D., & Gibson, J. (2019). Rethinking teacher retention in hard-to-staff schools. *Contemporary Issues in Education Research*, *12*(1), 27-33 (EJ1203451). ERIC. https://files.eric.ed.gov/fulltext/EJ1203451.pdf

Hughes, A. L., Matt, J. J., & O'Reilly, F. L. (2015). Principal support is imperative to the retention of teachers in hard-to-staff schools. *Journal of Education and Training Studies, 3*(1), 129-134 (EJ1054905). ERIC. https://files.eric.ed.gov/fulltext/EJ1054905.pdf

Huysman, J. T. (2008). Rural teacher satisfaction: An analysis of beliefs and attitudes of rural teachers' job satisfaction. *Rural Education*, *29*(2), 31-38 (EJ8692910). ERIC. https://files.eric.ed.gov/fulltext/EJ869291.pdf

Hylton, N. R., & Vu, J. A. (2021). Creating a work environment that supports staff retention. *Young Children, 74*(4), 34-38. https://www.proquest.com/openview/88b65c0432f845ef94a9e0bc8a7fbb67/1?pq-origsite=gscholar&cbl=27755

IBM Corporation. (2021). SPSS Statistics, Version 27. [ComputerSoftware]. Author.

Ingersoll, R. (2001). *Teacher turnover and teacher shortages: An organizational analysis* [GSE Faculty Research, University of Pennsylvania] University of Pennsylvania Scholarly Commons. https://repository.upenn.edu/cgi/viewcontent.cgi?article=1093&context=gse_pubs

Lazarev, V., Toby, M., Zacamy, J., Lin, L., & Newman, D. (2017). *Indicators of successful teacher recruitment and retention in Oklahoma rural school districts* (ED576669). National Center for Analysis of Longitudinal Data in Education Research. ERIC. https://files.eric.ed.gov/fulltext/ED576669.pdf

Leech, N. L., Barrett, K. C., & Morgan, G. A. (2015). *IBM SPSS for intermediate statistics: Uses and interpretations* (5th ed.). Routledge.

Lester, P. A. (1987). Development and factor analysis of the teacher job satisfaction questionnaire (TJSQ). *Educational and Psychological Measurement, 47*(1), 223-233.

Lochmiller, C. R., Sugimoto, T. J., & Muller, P. A. (2016). *Teacher retention, mobility, and attrition in Kentucky public schools from 2008 to 2012* (ED562734). National Center for Education Evaluation and Regional Assistance. ERIC. https://files.eric.ed.gov/fulltext/ED562734.pdf

Maheshawri, V. K. (2018). *Causal-comparative research*. http://www.vkmaheshwari.com/WP/?p=2491

Maslow, A. H. (1943). *A theory of human motivation*. Classics in the History of Psychology. https://2wz7603jj73w2s7jpn27zxpe-wpengine.netdna-ssl.com/wp-content/uploads/2015/10/Maslows-Theory-of-Human-Motivation.pdf

McLeod, S. (2018). *Maslow's hierarchy of needs.* Simply Psychology. https://www.simplypsychology.org/simplypsychology.org-Maslows-Hierarchy-of-Needs.pdf

Miller, G. J. (2020). Teacher retention in a rural east Texas school district. *SchoolLeadership Review*, *15*(1), 1-14 (EJ1283651). ERIC. https://files.eric.ed.gov/fulltext/EJ1283651.pdf

Miller, J. M., Youngs, P., Perrone, F., & Grogan, E. (2020). Using measures of fit to redict beginning teacher retention. *Elementary School Journal, 120*(3), 399-421. https://www.journals.uchicago.edu/doi/10.1086/707094

Monk, D. H. (2007). Recruiting and retaining high-quality teachers in rural areas. *Futureof Children*, *17*(11), 155-174 (EJ795884). ERIC. https://files.eric.ed.gov/fulltext/EJ795884.pdf

National Center for Education Statistics. (2019). *TALIS 2018 results.* https://nces.ed.gov/pubs2019/2019132.pdf

Nickerson, C. (2021). *Herzberg's motivation two-factor theory*. Simply Psychology. https://www.simplypsychology.org/herzbergs-two-factor-theory.html

Oke, A. O., Ajagbe, M. A., Ogbari, M. E., & Adeyeye, J. O. (2016) Teacher retention and attrition: A review of literature. *Mediterranean Journal of Social Sciences, 7*(2), 371-378. https://www.mcser.org/journal/index.php/mjss/article/view/8912/8609

O'Reilly, P. (2014). Teachers at work: Factors influencing satisfaction, retention, and the professional well-being of elementary and secondary educators. [Doctoral dissertation, City University of New York]. CUNY Academic Works.

https://academicworks.cuny.edu/cgi/viewcontent.cgi?article=1087&context=gc_etds

Organization for Economic Co-operation and Development. (2021). *Teacher working conditions.* https://gpseducation.oecd.org/revieweducationpolicies/-!node=41734&filter=allhttps://gpseducation.oecd.org/revieweducationpolicies/

Pechota, D., & Scott, D. (2020). *School and district leadership* (ED603064). Education Commission of the States. ERIC. https://files.eric.ed.gov/fulltext/ED603064.pdf

Perrachione, B. A., Rosser, V. J., & Peterson, G. J. (2008). Why do they stay? Elementary teacher's perceptions of job satisfaction and retention. *Professional Educator*, *32*(2), 1-17 (EJ862759). ERIC. https://files.eric.ed.gov/fulltext/EJ862759.pdf

Player, D., Youngs, P., Perrone, F, & Grogan, E. (2017). How principal leadership and person-job fit are associated with teacher mobility and attrition. *Teaching and Teacher Education, 67*(1), 330-339. https://www.sciencedirect.com/science/article/abs/pii/S0742051X17310065

Podolsky, A., Kini, T., Bishop, J., & Darling-Hammond, L. (2017). Sticky schools: How to find and keep teachers in the classroom. *Phi Delta Kappan*, *98*(8), 19-25. https://kappanonline.org/podolsky-kini-bishop-darling-hammond-sticky-schools-find-keep-teachers-classroom/

Prowell, W. L. (2019). *Examining the experiences of retained nonrural teachers serving in high-turnover rural school districts* [Doctoral dissertation, University of South Carolina]. University of South Carolina Scholar Commons. https://scholarcommons.sc.edu/cgi/viewcontent.cgi?article=6588&context=etd

Public Schools First NC. (2021). *The facts on rural schools in NC.* https://www.publicschoolsfirstnc.org/resources/fact-sheets/the-facts-on-rural-schools/

Reaves, S. J., & Cozzens, J. A. (2018). Teacher perceptions of climate, motivation, and self-efficacy: Is there really a connection. *Journal of Education and Training Studies*, 6(12), 48-67 (EJ1194029). ERIC. https://files.eric.ed.gov/fulltext/EJ1194029.pdf

Rosenberg, D. & Anderson T. (2021). Teacher turnover before, during, and after COVID. *Education Resource Strategies* (ED614496). ERIC. https://files.eric.ed.gov/fulltext/ED614496.pdf

Rural School and Community Trust. (2017). *Leveling the playing field for rural students.* https://www.aasa.org/uploadedFiles/Policy_and_Advocacy/Resources/AASA_Rural_Equity_Report_FINAL.pdf

Shakeel, N., & But, S. (2015). Factors influencing employee retention: An integrated perspective. *Journal of Resources Development and Management*, *6*(1), 32-49. https://core.ac.uk/download/pdf/234696049.pdf

Showalter, D., Hartman, S., Johnson, J., & Klein, B. (2019). *Why rural matters 20182019: The time is now.* Rural School and Community Trust. http://www.ruraledu.org/WhyRuralMatters.pdf

Sorensen, L. C., & Ladd, H. F. (2020). *The hidden costs of teacher turnover*. *AERA Open, 6*(1), 1-24 (EJ1248542). ERIC. https://files.eric.ed.gov/fulltext/EJ1248542.pdf

State of Arkansas Bureau of Legislative Research. (2017). *Academic facilities funding, expenditures and distress.* https://www.arkleg.state.ar.us/Bureau/Document?type=pdf&source=education%2fK12/AdequacyReports/2018%2f2017-11-29&filename=AcademicFacilitiesFunding-ExpendituresandDistress-ReportBLR13

State of Arkansas Bureau of Legislative Research. (2020a). *Selected issues affecting teacher recruitment and retention*. https://www.arkleg.state.ar.us/Bureau/Document?type=pdf&source=education/K12/AdequacyReports/2020/2020-05-19&filename=EX+D1+Teacher+Recruitment+and+Retention+Report%2C+BLR%2C+(16)

State of Arkansas Bureau of Legislative Research. (2020b). *Teacher salary report*. https://www.arkleg.state.ar.us/Bureau/Document?type=pdf&source=education/K12/AdequacyReports/2020/2020-06-09&filename=EX+C3+Teacher+Salary+Report%2C+BLR+(24)

Taylor, C. Jardine, D. McNaney, C. Lehman, G., & Fok-Chan, E. (2014). *Teacher rewards: Going beyond the stickers: Moving beyond extrinsic motivation* (ED546455). ERIC. https://files.eric.ed.gov/fulltext/ED546455.pdf

Teach Plus. (2013). *Musical chairs: Teacher churn and its impact on Indianapolis public schools.* https://www.teachplus.org/sites/default/files/publication/pdf/musical_chairs.pdf

Texas Comprehensive Center. (2018). *Grow your own teachers initiatives resources*. https://tea.texas.gov/sites/default/files/Additional%20Resource%20-%20Grow%20Your%20Own%20Teachers%20Initiatives%20Resources.pdf

Texas Rural Schools Task Force. (2017). *Elevating support for Texas rural and small schools* (ED594979). https://files.eric.ed.gov/fulltext/ED594979.pdf

Toropova, A., Myrber, E., & Johansson, S. (2021). Teacher job satisfaction: The importance of school working conditions and teacher characteristics. *Educational Review, 73*(1), 71-97. https://www.tandfonline.com/doi/full/10.1080/00131911.2019.1705247

Tran, H., & Dou, J. (2019). An exploratory examination of what types of administrative support matter for rural teacher talent management: The rural educator perspective. *ICPEL Education Leadership Review, 10*(1), 133-149 (EJ1234912). ERIC. https://files.eric.ed.gov/fulltext/EJ1234912.pdf

Turner, J. S., Finch, K. K., & Uribe-Zarain, X. (2018). The economics of a four-day week: Community and business leaders' perspectives. *Applied Economics and Finance, 5*(2), 168-174. https://bearworks.missouristate.edu/articles-coe/287/

Ulferts, J. D. (2016). A brief summary of teacher recruitment and retention in the smallest Illinois rural schools. *Rural Educator, 37*(1),14-24 (EJ1225312). ERIC. https://files.eric.ed.gov/fulltext/EJ1225312.pdf

United States Census Bureau. (2017). *What is rural America?* https://www.census.gov/library/stories/2017/08/rural-america.html

United States Department of Education. (2013). *Teacher compensation.* https://oese.ed.gov/archived/oii/teacher-compensation/

United States Government Accountability Office. (2020). *K-12 education: School districts frequently identified multiple building systems needing updates or replacement.* https://www.gao.gov/assets/gao-20-494.pdf

University of Arkansas Division of Agriculture Research and Extension. (2021). *Rural profile of Arkansas*. https://www.uaex.uada.edu/publications/pdf/MP564.pdf

Van Overschelde, J. P., Sunders, J. M., & Ash, G. E. (2017). Teaching is a lot more than just showing up to class and grading assignments: Preparing middle-level teachers for longevity in the profession. *Middle School Journal*, *48*(5), 28-38. https://www.tandfonline.com/doi/full/10.1080/00940771.2017.1368319

Yavuzkurt, T., & Kiral, E. (2020). The relationship between workplace friendship and job satisfaction in education organizations. *International Journal of Progressive Education, 16*(5), 404-424. (EJ1273322). ERIC. https://files.eric.ed.gov/fulltext/EJ1273322.pdf